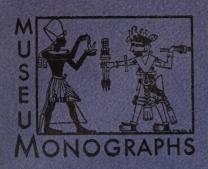
James B. Pritchard

Hebrew Inscriptions and Stamps from Gibeon



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# HEBREW INSCRIPTIONS AND STAMPS FROM GIBEON

JAMES B. PRITCHARD

THE UNIVERSITY MUSEUM
UNIVERSITY OF PENNSYLVANIA
PHILADELPHIA 4



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# HEBREW INSCRIPTIONS AND STAMPS FROM GIBEON

JAMES B. PRITCHARD

PUBLISHED BY
THE UNIVERSITY MUSEUM

UNIVERSITY OF PENNSYLVANIA

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#### **ABBREVIATIONS**

AASOR Annual of the American Schools of Oriental Research.

ANEP James B. Pritchard, The Ancient Near East in Pictures relating to the Old

Testament, Princeton, 1954.

BASOR Bulletin of the American Schools of Oriental Research.

Diringer, Iscrizioni D. Diringer, Le iscrizioni antico-ebraiche palestinesi, Firenze, 1934.

Gezer R. A. S. Macalister, The Excavation of Gezer, London, 1912.

Lachish III O. Tufnell, Lachish III: The Iron Age, London, 1953.

Moscati S. Moscati, L'epigrafia ebraica antica, 1935-1950, Rome, 1951.

PEQ Palestine Exploration Quarterly.

TN C. C. McCown, Tell en-Nasbeh, Berkeley, 1947.

#### INTRODUCTION

The excavations at el-Jib, in the Hashemite Kingdom of Jordan, during the summers of 1956 and 1957, yielded a rich harvest of inscriptions written in the Hebrew script of the biblical period. All the epigraphic material—with the exception of the marks on a stone weight—appeared on the handles of jars. Fifty-six handles were incised with inscriptions which served as labels for the jars; 80 handles bore the royal stamp with the symbol of either the scarab or the winged sun-disc and many of these impressions contained the words l-mlk followed by one of the four place names, Hebron,  $mm\check{s}t$ , Socoh, or Ziph; 8 handles were impressed with private stamps. The principal significance of this material lies in the discovery of the name of the ancient city of Gibeon on 27 jar handles. Although the identification of Gibeon with el-Jib was suggested more than a century ago this documentation is of unique importance for fixing the location of the biblical city on the modern map of Jordan. The purpose of this monograph is to make available as promptly as possible this important epigraphic material in drawings, photographs, and commentary.

The work in 1956 was carried on under the direction of the writer for a ten-week period, extending from June 18 to August 24. The staff for this season was composed of Sherman E. Johnson, Jean H. Johnson, Marcia J. Rogers, T. Hartley Hall IV, Subhi Muhtadi, Robert C. Dentan, Thorir Thordarson, and H. Neil Richardson. Excavation was resumed in 1957, when the season extended from July 23 to August 29. Since the work for this five-week period was limited to the area of the pool and consisted of removing debris from this one area, it was possible to double the amount of work by employing two shifts of workmen, the first working from 5:00 A.M. until noon, and the second from noon until 6:30 P.M. In addition to the writer, who again served as director, the staff consisted of, Fred V. Winnett, Asia G. Halaby, Linda A. Witherill, Claus-Hunno Hunzinger, and Subhi Muhtadi.

The excavations were sponsored by the University Museum of the University of Pennsylvania and the Church Divinity School of the Pacific, with the cooperation of the American School of Oriental Research in Jerusalem. The Department of Antiquities of the Hashemite Kingdom of Jordan not only granted a license for the excavations but helped in many other ways with the arrangements at el-Jib. Mr. G. Lankester Harding, Mr. Said Dura, and Dr. Awni Dajani rendered valuable assistance. In the decipherment and interpretation of the epigraphic materials I have had the help of a number of scholars, who have examined either the materials or drawings and photographs. Without involving them in responsibility for any of my conclusions I wish to express thanks to the following for many helpful suggestions: Frank M. Cross, Jr., R. de Vaux, J. T. Milik, W. F. Albright, G. L. Della Vida, Emil G. Kraeling, David Diringer, Sabatino Moscati, and the late Robert H. Pfeiffer.

Preliminary reports on the results of the two campaigns have appeared in articles by the writer in the following publications: *University Museum Bulletin*, Vol. 21, No. 1, March, 1957, pp. 3-26, and Vol. 22, No. 2, June, 1958, pp. 12-24; *The Biblical Archaeologist*, Vol. 19, December, 1956, pp. 66-75; *The Illustrated London News*, October 27, 1956, pp. 695-697, and March 29,

1958, pp. 505-507.

The drawings of the inscribed jar handles on Figs. 1—3 were made by the writer. The 43-1/2 handles which were allotted to the excavator were brought to Berkeley, where the inscriptions were traced directly from the handles on plastic drawing paper stretched over the curved surfaces. In these cases the handle is shown longer in the drawing than in the photograph. The 12-1/2 handles which were claimed by the Jordan Government for the Museum in Amman were drawn from photographs which had been made in Jerusalem. The end of the handle which was attached to the neck of the jar is shown in the drawings as rounded; the other end, which was attached to the shoulder of the jar, can generally be recognized from the drawings. Since the ends of the handles have been indicated in the drawings, the photographs have been cropped so as to include only the inscriptions. During the course of the 1957 season, 53 of the inscribed jar handles were found; of these, Fred V. Winnett and Claus-Hunno Hunzinger independently made drawings and notes in Jerusalem, which have been invaluable in checking my own judgment and sight while making the final drawings. The royal seal and the private stamp impressions have been drawn by Douglas M. Spence under my direction. Other drawings were done by Linda A. Witherill.

All of the material, with the exception of 5 impressions of royal stamps, came from the debris which filled the rock-cut pool. A full description of this construction is planned for a subsequent monograph on the water system at Gibeon; until it appears the preliminary reports cited above will suffice.

J. B. P.

Church Divinity School of the Pacific Berkeley, Califomia July 12, 1958

# INSCRIBED JAR HANDLES

Drawings of the inscriptions appear on Figs. 1-3; photographs, on Figs. 4-5; drawings of profiles of jars and of cross sections of handles appear on Fig. 6:1-15. In the transliteration at the beginning of each entry in the catalogue, the diagonal mark, /, indicates the presence of the word divider; round brackets or parentheses, ( ), denote the neck of the jar to which the top of the handle is attached; square brackets are used for restorations in the inscription. The depth of the layer of debris in which the handle was found is given in meters, measured from the rim of the pool at the point where the steps begin at the north side. "Up" means that the writing on the handle begins at the end attached to the shoulder of the vessel and continues toward the neck; "down" is used when the direction of the writing is from the neck downward toward the shoulder. Handles claimed by the Department of Antiquities are marked "Amman." Those marked with the notation "Phila." belong to the excavator's share and are now in the University Museum of the University of Pennsylvania, Philadelphia. Unless otherwise noted the inscription was incised on the handle after the jar had been fired. The 6 examples which were impressed in the wet clay before firing are so indicated and are shown in the drawings by letters in double line; the others are in single line. Handles found in the 1956 season are indicated as having come from that year; all others came from the campaign of 1957.

#### CATALOGUE

- 1. gb < n / gdr / < ( ) zryhw. 5.80-6.50 m. Up and down. Gray. Letters cut with a broad point in relatively deep impressions. Word divider between the words, but not at the end of the inscription. The directional slant of the word divider seems to depend upon the direction of the line which the scribe cut preceding the divider. There are two different forms of ayin; the first is a half circle, the second is round in form. The stance of the second g differs from the first, as does that of the second r from the first. The stance of the h is peculiar. Since the two handles of the jar are fully preserved, it is clear that this is the complete text of the inscription. Field No. 396. Amman. Figs. 6:1, 12:4.
- 2.  $[gb^{c}n/gd]r/c()$  zryhw. 5.00-5.30 m. Up and down. Gray, but pinkish brown in section. Handles are similar to No. 1. Letters not so deeply incised as No. 1, but similar in character. Stance of the z, r, h, and w is more normal than in No. 1. Field No. 345. Amman. Fig. 6:3.
- 3.  $[gb^cn/]gdr/^c()$  [zryhw]. 5.80-6.50 m. Up [and down]. Grayish buff. Similarities to Nos. 1 and 2, both in handle and in arrangement of letters, make it possible to reconstruct this inscription. Note the rectangular ayin, which is without parallel. The head of the r is more pointed than that of the d. Field No. 383. Phila.

- 4. [gb `n / gdr / ``c" (]) zryh [w]. 5.30-5.80 m. [Up] and down. Grayish buff. Could be a second handle to No. 3, although no direct join is possible. Note that the vertical stroke of the r is relatively short, although a break in the surface of the clay at this point may have destroyed the lower part of the letter. Field No. 363, Phila. Fig. 6:14.
- 5.  $[gb ^cn / gdr / ^c()] zryhw$ . 5.30-5.80 m. [Up] and down. Grayish buff. Incisions made with broad tool and deeply incised. The stance of the r is perpendicular. Note the curved upper part of the w. Field No. 360. Phila. Fig. 6:12.
- 6. [gb iny n/gdr (]) iny zr [yhw]. 5.30-5.80 m. [Up] and down. Grayish buff. The stroke to the left of the r probably belongs to the following y. The ayin was made by first scratching a straight line and then adding a half circle; cf. the first ayin of No. 1. Unlike the other Azariah handles, Nos. 1-5, the ayin is on the second handle. Field No. 364. Amman.
- 7.  $[gb]^cn/gdr/^cz$  ([) ryhw]. 6.60-7.30 m. Up and [down]. Pinkish buff. The second ayin is written as a straight line and a half circle, as in the first occurrence in No. 1 and in No. 6, but here the line is below the half circle. The line which extends from the upper part of the d seems to be the starting point for the writing of this letter. There is a slight vertical stroke at the right of the lower line of the z. Field No. 451. Phila.
- 8.  $gb ^c n / gdr / \dots$  6.60 m. Up. Grayish buff. Found in 1956 and published in *University Museum Bulletin*, Vol. 21, No. 1, March, 1957, p. 21, Fig. 16. The n has a horizontal stroke at the bottom. For the first g, cf. the first g of No. 1. Field No. 218. Amman. Fig. 6:8.
  - 9.  $gb ^c n / gd [r]$ .... 5.30-5.80 m. Up. Grayish buff. The vertical strokes of the n and the second g are long and cross each other. Field No. 359. Phila.
- 10.  $gb \le n / gdr \dots$  7.30-7.60 m. Up. Grayish buff. Letters deeply incised with broad instrument on a rough surface. Long, horizontal stroke at bottom of b. Word divider is small; only a dot. Field No. 475. Phila.
- 11.  $gb n dr \dots 6.50-6.60 m$ . Up. Grayish buff. Scribe omitted the g of gdr, probably by mistake. The r has a longer vertical stroke than the d. As in No. 7, the top of the d extends to the right. Incised deeply with a sharp instrument. Field No. 403. Phila.
- 12.  $[gb \cdot n / gdr / \circ () zr]yhw$ . 4.60-5.00 m. [Up] and down. Grayish buff. Letters incised with a blunt instrument like that used in No. 1. The type of incision, the position of the letters yhw on the lower half of the handle, and the long blank space after the w, make it almost certain that this belongs to the Azariah class. Field No. 315. Phila.
- 13. . . . yhw. 6.50-6.60 m. Down. Pink. The partly preserved y is peculiar. It may be that the cross bar of the y, which usually extends to the left, is mostly on the right side of the vertical; cf. the y in No. 15. Field No. 402. Phila.

- 14.  $gb ^c n gdr ^ 2 mryhw$  (. 5.30-5.80 m. Up. Pink. The two r's are similarly written. The h seems to have been done hastily, with the lowest horizontal stroke longer than the other two; cf. No. 5. The  $^2 mryhw$  was cut on the lower side of the handle because the ridge in the center of this part of the surface made it difficult to write in the same line with  $gb ^c n gdr$ . No word dividers are used. Field No. 358 A. Phila. Fig. 6:5.
- 15. [gb]  $^cn/gdr$   $^3mryhw$  ( . 6.60-7.30 m. Up. Gray. Letters deeply inscribed with sharp tool. The first r has a short vertical stroke; perhaps the scribed did not wish to mar the d. No word divider between the second and third words. Field No. 443. Amman. Fig. 6:4.
- 16.  $[gb]^c n / gdr / {}^2mryhw$  ( . 5.30-5.80 m. Up. Pinkish buff. Incisions lightly scratched, except for the vertical strokes of the g, aleph, r, and w, which are long and heavily cut. The end of the inscription is badly crowded. Again, as in Nos. 14 and 15, the entire formula has been put on one handle. Field No. 362. Phila. Fig. 6:13.
- 17.  $[gb ^cn / gd]r / ^2mryhw$  ( . 6.50-6.60 m. Up. Gray. Letters are lightly inscribed with sharp instrument. Surface of handle uneven and rough. Unexplained diagonal line between the word divider and the aleph. It might be the extra stroke corresponding to the first aleph in No. 21. The second r was made very small, probably because of the lack of space at the end of the handle. Field No. 404. Phila.
- 18.  $gb ^cn / gd [r / ^5] mryhw$ . 5.90-6.20 m. Up. Pink. Found in 1956. Published in the University Museum Bulletin, Vol. 21, No. 1, March, 1957, p. 20, Fig. 15; Illustrated London News, October 27, 1956, p. 696, Fig. 4· Deeply incised. Remainder of cursive tail of the first r seems to extend under the d; cf. No. 19. Unexplained diagonal line under the d. The h has four horizontal strokes. Field Nos. 97, 98. Amman, Phila.
- 19.  $gb \, ^c n \, gdr \, [^2mryhw]$ . 6.60-7.30 m. Up. Pink. Deeply incised. Note that the tail of the r is properly longer than that of the d. The stroke to the extreme left is probably the lower part of the aleph. The lettering is similar to the Amariah handle No. 14; also, the clay and color are almost identical with No. 14. Field No. 499. Phila.
- 20. . . . . yhw. 5.30-5.80 m. Up. Pink. Handle fragment wider at the left than at the right. Small letters, deeply cut. Trace of an r at the right. Horizontal line at the lower right may be the tail to an m; cf. No. 14, where the tail of the m extends to the left. It is most likely that this fragment belongs to an Amariah handle. Field No. 365. Phila. Fig. 6:15.
- 21.  $gb^cn/dml^2/sb^3l$  ( . 7.30-7.60 m. Up. Almost certainly belongs with No. 22. Pink. Inscribed before firing. Triangular ayin. The aleph's are peculiar, in that they are made with four strokes. There is a slight possibility that the fourth stroke was made accidentally by the stylus as it was moved from one position to another across the wet clay. The b could possibly be read as a p; but compare the open b in No. 23. Field No. 472. Phila.
- 22.  $hnnyhw / nr^2 / ($ . 7.30-7.60 m. Up. Almost certainly belongs with No. 21. Pink. Inscribed before firing. The r is peculiar in that it does not have the lower stroke of the head. The aleph is made in the same way as those of No. 21. Word divider at the end of the inscription. Field No. 472 A +476. Phila.

- 23.  $gb^{c}n$ ... 6.50-6.60 m. Up. Pink. Inscribed before firing. There is no stroke for the lower horizontal line of the head of the b; note the absence of the corresponding part of the r in No. 22. The ayin is triangular and not quite closed at the bottom. The line to the extreme left may be the end of a word divider. Field No. 407. Phila.
- 24.  $[hnn]yhw/nr^2/($ . 2.10-3.00 m. Up. Pink. Inscribed before firing. Large letters, deeply incised with a broad tool. Word divider also placed at the end of the inscription, as in No. 22. There is a possibility that this may be from a jar of which No. 30 is the other handle. The complete inscription would then correspond to that of Nos. 21 + 22. The aleph is peculiar in that it is made with four strokes. The order in which the scribe made the strokes of the n and r is apparent. In each case he made the upper triangular part of the letter first and then added the vertical stroke. Field No. 255. Amman. Fig. 6:6.
- 25.  $[g]b^cn/gdr/\ldots$  5.80-6.50 m. Up. Pink. Inscribed before fixing. Large letters, deeply incised. The ayin is triangular in form, as in Nos. 21 and 23, but the stance is different. The tails of the d and the r are of equal length. The b is open as in No. 23 and in the second b of No. 21. Beginning of a letter at the extreme left. Field No. 389. Phila.
- 26. . . .  $[d]ml^2$  gb  $^cn$  ( . 5.80-6.50 m. Up. Pink. This and No. 28 are the only handles on which gb  $^cn$  follows another word. No word divider. The ayin is triangular. The vertical strokes of the n are not parallel, as in the more normal form of the letter. The short vertical stroke below the preserved portion of the d is probably accidental. Field No. 384. Amman.
- 27. gb  $^cn$  /  $dml^2$  . . . . 5.80-6.50 m. Up. Grayish buff. Letters cut with a sharp tool. The ayin is long and narrow. The two horizontal strokes of the aleph are slanted diagonally. Field No. 388. Amman.
- 28.  $[dm]l^{\circ}gb^{\circ}n$  ( . 7.30-7.60 m. Up. Gray. The ayin is similar to the first ayin in No. 1. The sharp angle of the n is peculiar. The upper horizontal stroke of the aleph does not extend through the vertical. The stance of the g is irregular. Nothing follows  $gb^{\circ}n$  on this handle, and since the l of  $[dm]l^{\circ}$  is on the body of the jar, it is highly probable that the two words constituted the entire inscription on this handle. No word divider. Field No. 473. Amman.
- 29.  $[g]b^cn/dml[^2]...$  7.30-7.60 m. Up. Letters incised deeply with blunt instrument. Since the preserved portion covers only about one-third of the handle, it is possible that the handle contained considerably more inscribed material. On the vertical strokes of both the n and the m the ends turn upward; cf. Nos. 33, 37, 44, 45, and 48. Field No. 477. Phila.
- 30. [g] b cn.... 4.60-5.00 m. Up. Pink. Inscribed before firing. Large letters, deeply impressed. Shape of ayin is noteworthy. Possibly from the same jar-but another handle-as No. 24. Field No. 314. Phila.
  - 31. gb  $^cn$  / gdr . . . . 5.80-6.50 m. Up. Pink. Letters deeply incised with broad tool. Field No. 390 A. Phila.

- 32.  $gb^cn/gdr$  (  $.hnnyhw nr^2$  ( .  $6.60-7.30 \, \mathrm{m}$ . Up on each handle. Pink. One handle was inscribed from the shoulder to the neck; the vessel was then turned 180 degrees and the other handle inscribed from the shoulder upward to the neck. Only one word divider appears. The letters are deeply incised, but carelessly done. The w cuts through the horizontal strokes of the h. The r of the  $r^2$  has a small head. The d and the r of the gdr are almost identical and its r is in contrast with the r of the  $nr^2$ . The line between the w and the r seems to be a mistake, or possibly a word divider. Field No. 495. Phila. Fig. 6:2.
- 33:  $\frac{1}{2}$  nnyhw /  $[nr^2]$ . 5.80-6.50 m. Up. Pink. Possibly belongs to the same jar as No. 31. The color and the texture of the clay are similar and the wheel marks on the inside of the body of the jar preserved with the handles seem to correspond. In both No. 31 and No. 33 the n has been made with an additional horizontal stroke at the bottom. Field No. 390. Phila.
- 34. [g]  $b \le n g dr$ ...(. 5.80-6.50 m. Up. Gray to buff. A complete handle with inscription lightly incised. Following the g dr, there is room for three or four letters, a space which has some faint strokes, none of which can be read with any degree of certainty. The surface of the handle at this point is uneven and what seems to be writing may be only the imperfections on the surface. The n is very short. This may be from the jar to which No.38 belongs. Field No.393. Phila.
- 36.  $gb^cn / gdr /$ . 6.50-7.30 m. Up. Brick red. Letters deeply incised. Probably nothing more written on this handle. The lower stroke of the n meets the g. The d and the r have vertical strokes of the same length. This handle was found in two pieces and later joined together. Field No. 450 + 452. Phila.
- 37.  $[\frac{h}{n}] nyhw nr^2$ . 6.60-6.60 m. Up. Pink. Deeply incised with blunt instrument. The second n is turned up at the bottom, as in No. 29 and elsewhere. The lower horizontal stroke of the aleph does not cross the vertical. Field No. 406. Phila.
- 38. hnnyhw nr<sup>2</sup>. 5.80-6.50 m. Up. Gray to buff. Small letters lightly inscribed with sharp instrument. Possibly belongs with No. 34. No word divider. Both the h and the h have only two horizontal strokes, and those of the former are not parallel. Note the space between the h and the n;cf. Nos. 41 and 42. Field No. 387+394. Phila.
- 39.  $hnnyhw nr^2$ . 7.30-7.60 m. Up. Gray. Letters faintly inscribed in a style similar to that on No. 38. Compare the two horizontal strokes for the h and the h with the same practice in No. 38. The n is made similarly on both handles, as is the r. Strong probability that same scribe wrote Nos. 38 and 39. Field No. 479. Phila.
- 40. \$\langle nnyhw n \left[r^2\right]\$. 5.90-6.20 m. Up. Pink. Found in 1956. Lightly inscribed with blunt instrument. Note the horizontal strokes at the ends of the n's. Field No. 99. Phila.

- 41. hnnyhw.... 4.45-4.60 m. Up. Pink. The h has only two horizontal strokes. The h is rather indistinct, but it too seems to have only two horizontal strokes. There is room after the break for hnnyhw to be followed by nr<sup>5</sup>. Remarkably similar to No. 42, and possibly by the same hand. Field No. 292. Phila. Fig. 6:9.
- 42.  $[h]nnyhw n [r^5]$ . 5.00-5.30 m. Up. Pink. The h has only two horizontal strokes. Letters similar to those of No. 41; possibly by the same hand. Field No. 344. Phila.
- 43. hnny[hw].... 5.80-6.50 m. Up. Pink. Rather poorly incised. Surface chipped away above the hnn. Vertical stroke of the y has been extended down to join the tail of the n in a ligature. Field No. 386. Phila.
- 44. hnnyh[w]... 5.80-6.50 m. Up. Pink. Moderately deep incisions. The h has two horizontal strokes; the h has three. Note the turned-up ends of the n's. Field No. 391. Phila.
- 45.  $[hnnyhw]/nr^{2}$  ( . 6.50-6.60 m. Up. Pink to buff. Letter scratched lightly with sharp instrument. Lines so faint that they can be seen only by turning handle to obtain various lightings. Possibly a w before word divider. Field No. 408. Phila.
- 46.  $[hnnyhw] nr^5$  ( . 6.60-7.30 m. Up. Gray. Letters incised with broad instrument to a medium depth. The aleph is conventional. The turned-up end of the n can be seen crossing the vertical stroke of the r; cf. No. 37. Field No. 444. Phila.
- 47.  $[\frac{h}{r}]nnyhw\ r^2$  ( . 5.80-6.50 m. Up. Gray. Deeply incised, but crudely written inscription. When the scribe had finished  $[\frac{h}{r}]nny$ , he apparently did not have sufficient space for the hw on the same line. He wrote the hw below the y, omitted the n, and crowded the  $r^2$  into the remaining space above. The suggestions given above must be regarded as tentative. Field No. 395. Phila.
- 48.  $[hnnyhw]/nr^{5}$  ( . 6.50-6.60 m. Up. Pink. Letters lightly inscribed with a sharp instrument, as in No. 45. Note the up-turned tail of the n. The diagonal line which crosses the vertical stroke of the aleph may be a word divider at the end. Field No. 405. Phila.
- 49.  $[hnnyhw\ n\ ]r^{5}$  ( . 7.30-7.60 m. Up. Gray to pink. This contains the same faint cutting with a sharp instrument found in Nos. 17, 45, and 48. The r is clear. The upper horizontal stroke of the aleph extends too far to the right; perhaps an accident. Field No. 474. Phila.
- 50.  $hnnyhw nr^2$  (. 6.60-7.30 m. Up. Pink. Deep impressions. No word divider. The y is peculiar, with its curved top. The n crosses the bottom of the following r. Field No. 447. Amman.
  - 51.  $gb^{c}nlgdrlhnn[yhw]$ . 6.60-7.30 m. Up. Pink. Clearly incised with a broad instrument to a medium depth. The letters are small, but well formed.

This is the one case in which hnnyhw appears on the same handle with  $gb^{\varsigma}ngdr$ . The division between the words is marked by an l. If the l is merely a word divider, it is unique. Cf. the form of the l in Nos. 26, 27, 28, and 29. Field No. 448. Phila.

- 52. hnnyhw / (. 6.60-7.30 m. Up. Pink. Large letters are clearly inscribed. Note that after the w there is a word divider. Although there is room for the nr<sup>5</sup> which follows hnnyhw in Nos. 22, 24, 32, 37, 38, 39, 40, 42, 47, and 50, it does not appear. Field No. 445. Amman.
- 53. . . . . yhw ( . 5.80-6.50 m. Up. Pink. This is the end of an inscription on the handle, and thus could be either Amariah or Hananiah. Field No. 385. Phila. Fig. 6:7.
- 54.  $[g]b^c n g dr$  ( . 6.60-7.30 m. Up. Pink. The heavy marks across the middle of the handle were accidentally made before firing. Note that the vertical stroke of the d is longer than that of the r. Field No. 446. Phila.
  - 55. [g] b n g dr. 5.30-5.80 m. Up. Pink. Letters are crudely incised, particularly the ayin. Field No. 217. Amman.
  - 56. gb ['n]... 6.60 m. Up. Pink. Found in 1956. For the rather straight tail of the b, see Nos. 32 and 54. Field No. 217. Amman.

#### PATTERNS OF THE INSCRIPTIONS

Most of the inscriptions on the jar handles conform to a set pattern:  $gb \,^c n \, gdr + a$  name of a person or persons. The only exceptions to this standard formula are (a) the omission of gdr on those handles which contain the personal name  $dml^{\, >}$ , and (b) two handles (nos. 26 and 28) on which  $dml^{\, >}$  is followed, rather than preceded, by the place name  $gb \,^c n$ .

Two complete examples of the upper part of a jar, in which both handles are attached to the neck (Nos. 1 and 32) give the pattern for the inscriptions and make possible a reliable reconstruction of many of the fragments. One other possible example of two complete handles belonging to one jar will be discussed below under  $dml^{>}$ .

Thirty-eight inscriptions, or 68% of the total number, contain either complete or fragmentary forms of one of the following personal names: Azariah, Amariah,  $dml^2$ , or Hananiah  $nr^2$ . When the material is arranged in groups according to these names, it is possible to make certain generalizations.

Azariah (Nos. 1-7). The complete inscription on No. 1, which contains both handles of the jar, makes it clear that the scribe began writing at the bottom of the first handle and continued, across the mouth of the jar, on the second handle. He placed the ayin of the 'zryhw on the first handle and the remainder of the word on the second, even though there was no lack of space for all of the word on the second handle. In four of the seven examples in this class (Nos. 1-4), the scribe divided the name 'zryhw in the same way; in No. 7, he placed 'z on the

first handle; in only one case (No. 6) is it clear that he put the entire name `czryhw on the second handle. A word divider is always used to separate words. The relatively small script is scratched on the clay with a blunt, broad tool; the letters are carefully formed. The handles of this class have a slight central ridge (Fig. 6:12, 14) and the color of the clay is gray to grayish buff, except for No. 7, which has a pink cast. These inscriptions were apparently the work of a single scribe, who was also responsible for No. 12.

Amariah (Nos. 14–18). The most obvious characteristic of the Amariah handles is the appearance of the formula  $gb \, ^c n \, gdr \, ^2 mryhw$  on one handle. The inscription begins at the bottom and continues upward to the neck of the jar. The writing of the entire formula on one handle occurs elsewhere on only one example, No. 51, which belongs to the Hananiah group. However, since in the Amariah group there are no complete tops with both handles attached, we cannot exclude the possibility that  $^3mryhw$  may have been followed by another name or names on the second handle. In fact, the similarities in script and clay between No. 17 and No. 49  $[hnnyhw \, n\,]r^2$  are striking. In general the tails of the letters of the inscriptions of this class are longer than those made by the scribe who produced the Azariah handles. The vertical strokes frequently intersect, as in Nos. 14, 16, and 18; sometimes the lines join to form ligatures, as in Nos. 15 and 18. Nos. 19 and 20 probably belong to the Amariah class. The word divider is used after  $gb \, ^c n$  in Nos. 15, 16, and 18, and after gdr in Nos. 16 and 17.

dml > (Nos. 21, 26-29). The five handles on which  $dml^3$  appears fall into two groups: (a) those in which the word is preceded by gb n (Nos. 21, 27, 29) and (b) the two examples of  $dml^{\circ}$   $gb^{\circ}n$  (Nos. 26 and 28). In the latter group there seems to have been no additional material on the handles; nor is the word divider used. It may be that this is an abbreviated or hastily written form of the usual formula. The best example of the  $dml^{5}$  class is the completely preserved handle No. 21, which was incised before firing, containing gb cn / dml / sb l, which fills all the available space. The two aleph's are each made with four strokes instead of the more usual form with three. The same form of aleph occurs in No. 22, and possibly in No. 24. The n's of No. 22 are also similar to the one in No. 21; so are the word dividers. These paleographical correspondences in Nos. 21 and 22 are strengthened by the observation that the wheel marks on the inside of the pieces of neck still adhering to the two handles seem to match. Upon the suggestion of Professor M. Edwin O'Neill, of the Department of Criminology of the University of California at Berkeley, I made a plasticine impression of the inside of the neck adhering to Nos. 21 and 22. When the enlarged photographs of the two impressions were compared, there remained little doubt that the two handles belonged to the same jar. The clay and color of the two correspond. It is most likely that the entire inscription reads:  $gb^{c}n / dml^{2} / sb^{2}l hnnyhw / nr^{2}$ . The other two examples of dml<sup>2</sup> inscriptions (Nos. 27 and 29) were incised after firing. The writing on these begins at the extreme lower end of the handle, so that there is room on the upper, but now lost, portion for the 5b  $^{\circ}l$  which follows the dml  $^{\circ}$  on No. 21. It is possible that two other fragments of handles inscribed before firing (Nos. 23 and 30) belong to the  $dml^2$  class. The b and the ayin of No. 23 are peculiar, in that each lacks a stroke to close the letter (cf. the second b in No. 21). No. 24 is also inscribed after firing and may possibly belong to a jar inscribed after the fashion of Nos. 21 and 22. However it must be noted that the forms of the aleph, r, and w on No. 24 are not similar to those on No. 22.

Hananiah nr<sup>2</sup> (Nos. 22, 24, 32, 33, 35, 37-52). On 21 handles

On 21 handles or fragments there appears either hnnyhw or hnnyhw  $nr^{3}$ . One complete-

ly preserved double handle (No. 32) contains the standard formula  $gb^cn/gdr$   $hnnyhw nr^2$ . The first two words were written upward on one handle and the second two words were also written upward, on the second handle. When we exclude from this group Nos. 22, and 24, discussed under  $dml^2$ , the remaining 19 examples were inscribed after firing. These 19 inscriptions can all fit into the formula of No. 32, with the exception of No. 51, which evidently had the entire formula written on one handle. No. 52 has only hnnyhw, without the usual  $nr^2$ , although there is room at the end for it. Several examples of the Hananiah inscriptions seem to have been done by the same scribe. In Nos. 35, 38, 39, 41, and 44, the h has been written with only two horizontal strokes. The practice of continuing the tail of the n into a horizontal line is apparent in Nos. 33, 37, 44, and 48. Wherever the aleph appears clearly, it is written in the conventional form, in contrast with the forms in No. 21. In all the Hananiah examples which were incised after firing, the normal word divider appears only three times (Nos. 32, 33, 52), in one of which cases it is at the end of the inscription. A word divider in the form of an l appears twice in No. 51.

#### COMMENTARY ON WORDS

Gibeon. The word appears in whole or in part 27 times on the handles. It always comes at the beginning of the inscription except in two examples (Nos. 26 and 28), when it follows  $dml^2$ . The name is the biblical Gibeon.

gdr. The three-letter word gdr which follows gb cn in the usual formula of the handles—it never appears in any other relationship-presents a problem of paleography. The word appears on our handles 19 times. In 68% of these instances (Nos. 3, 8, 10, 15, 16, 25, 31, 32, 34, 36, 51, 54, 55) the scribe has seemingly intended gdd, in that there is little or no difference in the lengths of the tails of the second and third letters; both are relatively short in most cases. Thus it was that on the basis of No. 8, discovered in 1956, I read without question gdd (University Museum Bulletin, Vol. 21, No. 1, p. 20). However, in 6 instances (Nos. 1, 7, 11, 14, 18, 19) the third letter of the word is apparently an r, to judge by the longer stroke which constitutes the tail of the letter. In other contexts the r appears some 21 times on the handles, and always with a long tail extending downward, either vertically or at a diagonal stance with the bottom to the right ( Nos. 1, 2, 4-6, 14-18, 24, 32, 37-39, 45-50). In no occurrence of the routside of the puzzling gdr/gdddoes the r have a short tail. If the word is to be read gdr, as it obviously should be in 6 instances, why did the scribe make the r almost identical with the d in 13 cases? A possible explanation is that the r was influenced in its form in this position by attraction to the preceding d. The word gdr was a part of a well-known formula, or "brand name," which was intended to be recognized rather than proof read, and the scribe may have liked the symmetry which resulted from writing the d and r very much alike. Strictly on the grounds of internal paleography we are forced to say that the word may be read either as gdr or gdd, and to look to lexicography for a possible solution to the problem.

The noun gdr appears in the story of Balaam and his ass, in Num. 22:24-25, where it is definitely associated with vineyards. Here translators have rendered gdr as "wall" (AV, RSV, Am. Trans.), "mur" (Bible de Jérusalem), "fence" (JV), or "stone wall" (Confraternity), despite the fact that the more common word for "wall," qyr, appears immediately afterwards in v. 25. Verses 24-25 read: "Then the angel of the Lord stood in the narrow way of the vineyards (krmym), a gdr on this side and a gdr on that side. And when the ass saw the angel of the Lord she pressed her-

selt against the wall (qyr) and pressed the foot of Balaam against the wall (qyr); and he smote her again." From these verses it would seem that the vineyards consisted of individual walled enclosures (gdr) which were arranged in this case with a narrow road between them. The wall against which the ass pressed the foot of Balaam was one belonging to a gdr. The word seems to be equivalent to the French "clos," a section of the vineyards, a walled plot, possibly the property of an individual which was marked off by a wall from that of his neighbor. In three other passages in the Bible, gdr is associated with a vineyard. The word appears in the famous parable of the krm in Isa. 5:1–7, where the vineyard wall, gdr, is specifically mentioned (verse 5). In Ps. 80:13, gdr appears in the context of a parable of Israel as a vine plucked out of Egypt. The question is asked: "Why hast thou broken down her walled enclosures (gdryh)?" In Prov. 24:31, gdr may well be associated with the krm which appears in verse 30. In Ezra 9:9, Ezra recounts the goodness of the Lord and recalls his mercy "to give us a gdr in Judah and in Jerusalem." Here the meaning of "walled enclosure" is more appropriate than the AV "wall." If gdr is associated with a vineyard, then the figure of Israel as the vineyard of the Lord (Isa. 5:7) may be alluded to.

These four instances of the use of the noun gdr in contexts which deal with viticulture are impressive when one considers that the word appears only 13 times in the Bible. The word gdr appears in the Bible also as a proper name of one of the Levitical singers (I Chron. 8:31 and 9:37). However, the appearance of gdr on our handles with the names of three different persons renders the possibility of its being a personal name very slight indeed. Finally, gdr appears in the Bible as a place name and it is of interest to note that just a half mile to the northeast of el-Jib is the modern Arab village of Jedireh, which Abel identifies with the Gedera of I Chron. 12:5 ( $G\acute{e}ographie$ , Vol. 2, p. 330).

Azariah. This is a common Hebrew name borne by more than 20 people mentioned in the Bible. The most famous is the eighth-century king of Judah (II Kings 14:21, etc.), also known as Uzziah. Azariah is also the name of a prophet (II Chron. 15:1), a priest (I Chron. 5:35) who was the father of Amariah-a name which also appears on the inscribed jar handles-Levites (II Chron. 29:12; Neh. 8:7), and princes (I Kings 4:2; Neh. 12:33). Azariah, along with Hananiah, is one of the four children of Judah mentioned in Daniel 1:6. Biblical evidence for the use of the name at the time of the last days of the Judaean state comes from Jeremiah 43:2, where an Azariah opposes the counsel of the prophet Jeremiah shortly after the conflicts at Mizpah and Gibeon. The name is likewise common on seals and impressions. A seal from Jerusalem contains not only the name Azariah, but the name of his father, Hananiah, enclosed by a border of pomegranates (Diringer, Iscrizioni, si 24). A seal which was acquired in Aleppo, and is probably to be dated to the eighth-seventh centuries, contains the image of a bull and lsm cyhw bn czryhw (Diringer, Iscrizioni, si 40). Two seal impressions from Tell el-Judeideh have šbnyhw czryhw and šbnyh czryh respectively (Diringer, Iscrizioni, b 5a and b 5c). Another impression, from Tell Sandahannah, is probably to be restored to read as the first impression from Tell el-Judeideh (Diringer, Iscrizioni, b 5b). Three impressions from Tell ed-Duweir bear spn czryhw (Lashish III, p. 341, Pl. 47A, 1, 2). Among the seventh-century graffiti from Tell Beit Mirsim are three letters which Albright restores as  $l \le z [ryhw]$  (AASOR, Vol. 21–22, p. 73, Pl. 60:3).

Amariah. Before the discovery of the inscribed handles at el-Jib the name Amariah was known only from the Bible, where its appearance is confined to Zephaniah, Chronicles, Ezra, and Nehemiah. It was a popular name, in that it was borne by eight different persons. The short form of the name, <code>?mryh</code>, is most commonly used; <code>?mryhw</code>, the form in our inscriptions, appears in I Chron. 24:23; II Chron. 19:11; and II Chron. 31:15. In Ezra 7:3, where the genealogy

of Ezra is given, Amariah is listed as the son of Azariah, another name appearing frequently on the jar handles.

Hananiah. The name Hananiah appears in the Bible generally as hnnyh, but in three places the longer form  $h_{nn\gamma}hw$  is used (Jer. 36:12; II Chron. 26:11; I Chron. 25:23). The name belongs to 13-or possibly 14-different persons, not one of whom can be placed anywhere else than in Judah or Benjamin. The most famous of the list, the opponent of Jeremiah, is said to have been from Gibeon (Jer. 28:1). Another Hananiah, mentioned in I Chron. 8:24, is listed as a Benjaminite; the perfumer who assisted in the repair of the wall of Jerusalem stood next but one to a Gibeonite (Neh. 3:7-8). The remaining Hananiahs seem to be associated also in one way or another with Jerusalem or Judah. It is interesting to note that all of the 27 occurrences of the name are found in literature which was written during the sixth century or later. Not a single example of the name is known from writings before the time of Jeremiah. A stamp seal found in the environs of Jerusalem and now in the Palestine Archaeological Museum (Diringer, Iscrizioni, si 50) contains the name Hananiah spelled just as it is on our handles, followed by the name of his father  $nr\gamma hw$ . It is of interest to note that just as in our inscriptions the bn is omitted between the name of the man and the name of his father. The forms of the letters on the Jerusalem seal and those on our handles are remarkably alike. Another seal from Jerusalem and now in Berlin reads: lhnnyhw bn 'zryhw (Diringer, Iscrizioni, si 24). This seal is of particular interest since it contains, in addition to Hananiah, the name Azariah. The form of the z, however, is different from that found on the inscribed jar handles, in that it has a vertical stroke which connects the two horizontal lines. A third Jerusalem seal is that of lhnnyhw bn hbr (Diringer, Iscrizioni, si 25). The script on this seal is not markedly different from that of the inscribed handles.

- nr². The name is probably a hypocoristic form of the biblical Neriah (Jer. 36:32, etc., the father of Baruch). For the use of hypocoristic forms see M. Noth, Die israelitischen Personennamen, p. 38, who lists 17 examples of the shortening of the divine name to ā. A private seal from Jerusalem (Diringer, Iscrizioni, si 50) contains the equivalent of our Imnyhw nr² in the inscription linghyhw nryhw. Another seal from Jerusalem contains the name of Neriah in the inscription ld/rmlyhw bn nryhw (Diringer, Iscrizioni, si 19), which is discussed below under dml². A third seal contains the name nryhw coupled with mšlm (Diringer, Iscrizioni, si 56); for Meshullam see below under private seals. A decorated seal in the Bezalel Museum in Jerusalem, Israel, has been read as lnry and compared with the biblical Neriah (Archiv Orientální, Vol. 18:3, 1950, pp. 65-67). The name Neriah also appears on Lachish Ostracon I (Lachish III, p. 331).
- $dml^2$ . This name is best explained as a hypocoristic form of dmlyhw on the analogy of  $nr^2 = nryhw$ , although it is not known in the Bible. On the Jerusalem seal mentioned above (Diringer, Iscrizioni, si 19) the second letter has been read as a d and as an r. Our material supports the reading ldmlyhw bn nryhw, to which both Clermont-Ganneau and C. C. Torrey adhered (AASOR, Vol. 2-3, 1923, p. 108, Fig. 10). Professor Jonas C. Greenfield has suggested to me that the element dml may be explained as the root dmm plus the preposition l. The meaning of the name would then be something like "Wait on the Lord," as in Ps. 37:7. Another similar formation containing a verb and the preposition l is the name hklyh in Neh. 1:1. The name  $dml^2$  appears on an ostracon from Samaria (J. W. Crowfoot et. al., The Objects from Samaria, London, 1957, p. 21).
  - $\ddot{s}b$ <sup>2</sup>l. This name appears only once (No. 21) and the reading of the b is open to some question, since the head of the letter is not closed by a stroke at the bottom. However, the obvi-

ous b in No. 23 is similarly made. The r of No. 22, which was probably written by the scribe who wrote No. 21, is also open at the bottom of the head. Thus the reading of b is to be preferred to a possible p. The name  $\delta b^{-1}l$  occurs in I Chron. 26:24 and, written as  $\delta bw^{-1}l$ , in I Chron. 23:16; 24: 20; 25:4, 20. Recently the name has been found on an inscription from an eighth-century tomb in Jordan ( $Palestine\ Exploration\ Fund\ Annual$ , Vol. 6, 1953, p. 52), and on an ostracon from Nimrud (Iraq, 1957, Pl. 34, opposite p. 141; for this reference I am indebted to Professor W. F. Albright).

#### DATE

There are four possible criteria for the date or dates of the inscribed jar handles: the archaeological context, the type of jar to which the handles belong, the script employed, and the periods in which the names which they contain were in common use. Although the evidence in each of these categories is indecisive, an examination of the possible criteria may limit the area of possibility.

Archaeological Context. The jar handles were found in unstratified debris which had been filled into the great pool from the area to the south of it. Tip lines from the southern rim of the pool indicated that the filling had been done by hand rather than by the action of surface water which drained into the pool from the higher area to the south. All but two of the handles (No. 24, which came from 2.10-3.00 m., and No.41, which was found in the layer 4.45-4.60 m.) came from 3 meters of fill which extended from a depth of 4.60 m. to 7.60 m., as measured from the rim. No inscribed jar handles were found in the remaining 3.50 meters of the cylindrical part of the pool or in the stepped tunnel which led downward another 13 meters to the spring room at the bottom. If the filling of the pool was done at one time, or at least in a relatively short period, as it now seems to have been, the concentration of inscribed jar handles in 3 meters of the debris can give no clue as to date. The restriction of the material to a limited portion of the fill does suggest, however, that it came from a particular area to the south of the pool which was probably being cleared for rebuilding and dumped into the pool at one time. The uninscribed pottery fragments which came from the layer 4.60-7.60 m. have been reserved for more detailed study at a time when the area to the south of the pool can be excavated and its pottery related to the filled-in debris. A preliminary examination of the pottery at the site during the course of the excavation resulted in the impression that most of the typical forms belonged to the very end of the Iron II period and that there were no forms which could be recognized as belonging to periods later than Iron II. Within the layer from which the bulk of the inscribed jar handles came were found 33 royal-stamp impressions. This is 45% of all the royal-stamp impressions for which the provenience in the pool is known. The range of the distribution in the debris of the royal-stamp impressions extended from 3.50 m. to 10.30 m., if we omit 3 peripheral examples, one above and 2 below this range. The level of the deposit of the private seals was lower. Only one was associated with the layer which produced the inscribed jar handles; 6 private seals belonged to deeper levels. If one accepts Diringer's dating for the royal stamps (Biblical Archaeologist, Vol. 12. 1949, p. 86) as from the end of the eighth century through the seventh century, then this same period would be appropriate for the inscribed jar handles with which they are so closely intermingled.

Type of Jar. No whole jar to which the inscribed handles belonged was found. The best preserved fragment of the original jar is the reconstructed No. 32, which is shown in drawing on Fig. 6:2. This example contains a fragment of the body of the vessel in addition to

the mouth, handles, neck, and shoulder. Since two handles were attached to the neck in three examples (Nos. 1, 2, and 32) and since the neck wherever it is preserved in a fragment attached to a handle is of a uniform type, we may assume that all the jars had two handles. The handles are generally oval in section, as can be seen from cross sections drawn on Fig. 6:1, 3, 6, 7, 9, 10, 13, and 15, but in some cases there is a slightly raised and usually sharp ridge along the upper side of the handle (Fig. 6:2, 5, 11, 12, 14). In no case do we have the type of ridge which is characteristic of the handles containing royal stamps, as drawn in TN, Vol. 1, p. 157, Fig. 37. The only parallel which has thus far been found to our jars is from Megiddo (R. S. Lamon and G. M. Shipton, Megiddo I, 1939, Pl. 10:39), which is similar to our Fig. 6:4. The handles of the Megiddo example are smaller and more curved than those of our examples. The jar from Megiddo comes from Str. II-III, or 780-600 B. C. according to the excavators. Professor James L. Kelso has informed me that he found a similar jar in an unstratified context at Beitin (letter of April 10, 1958). Dr. Paul W. Lapp has written me that in the Iron II section of the Student Gallery of the Palestine Archaeological Museum in Jerusalem there is a jar from Megiddo which resembles the one cited above, except for a variation in the rim. The lack of exact parallels to the jar with inscribed handles suggests that our jars were made for a special purpose and that the type was not widely distributed at other sites in Palestine. It is strange that with so much material from the Iron II and other periods in Palestine there are no examples of this double-handle jar other than the one example from Beitin and the remote parallels from Megiddo.

Among the many graffiti hitherto known from ancient Palestine only 3 appear Paleography. on jar handles. Two were found at Tell en-Nasbeh and are to be dated to the eighth century (TN, Vol. 1, p. 167-168). A third came from Lachish (Lachish III, p. 357, Pl. 52:8, incised before firing with lbnh). A comparison of the forms of the letters on our handles with the usual examples of early Hebrew writing on the Mesha stone and the Siloam inscription is difficult because of the different methods of writing employed. The cutting of a monumental inscription on stone involves a technique quite different from that of incising names on the handle of a somewhat fragile clay vessel. Added to the danger of applying too much pressure and cracking the jar, is the problem of writing on the curved surface of the handle. Comparisons with writings in ink on ostraca, as the Samaria and Lachish examples, are likewise subject to qualifications. There are marked individual differences in the style of writing found on the jar handles. Six were inscribed before the vessel was fired: the remainder were incised on baked clay. When one compares the photographs of the barely legible No. 47 with the carefully written No. 1, and the faintly scratched Nos. 17, 48, and 49 with some clearly written examples like Nos. 36 and 52, he is aware of the wide divergence of the workmanship. Some inscriptions are the work of a scribe who was accustomed to writing; others were obviously scratched by an illiterate workman who was copying what he saw or had seen on another handle (see mistakes of Nos. 11 and 51).

In the following paleographic observations about individual letters, abbreviations have been used for references to other Hebrew writing: Moab. = letters of the Moabite stone (ninth century); Sam. = letters of the ostraca from Samaria (eighth century); Sil. = Siloam inscription (eighth-seventh century). Lach. = Lachish ostraca, as given in tabular form in Birnbaum's table in J. B. Pritchard, The Ancient Near East in Pictures (ANEP), Fig. 286, line 13 (first part of sixth century); JS = Jewish seals as given in ANEP, Fig. 286, line 14, and in Diringer, Iscrizioni, Pl. 29-30. For convenient tables of forms of Sam. and Sil. see Diringer, Iscrizioni, Pl. 29-30, Moscati, Pl. 34, and ANEP, Fig. 286, with information in the catalogue of ANEP as to primary publications of the material. See Fig. 7.

- aleph. Appears 19 times. The conventional type of Moab. and Sam., made with a vertical stroke through two horizontals meeting at an angle, appears in all three classes of inscriptions containing the aleph. The writing of the letter with a vertical stroke intersecting a long and a short horizontal, characteristic of Sil. and Lach., appears in Nos. 37 and 38. The odd form made with four strokes, twice in No. 21 and once in No. 22, is without parallel. No. 24 is like Sil., but has the addition of a fourth stroke at the left.
- b. The b is sometimes formed with the tail curving gradually to the left in the cursive form of Sam., the Ophel ostracon, and Lach. (see Nos. 1, 9, 14, 19, 32, 54, and 56). In other examples it is formed with a tail which turns in a sharp angle to the left, as in Sil. and in some JS (see Nos. 8, 10, 21, 26, 29, 31, 36, and 55). The head of the b is closed in all examples, except in No. 23 and in the second b of No. 21.
- g. The stance of the g varies. Sometimes the vertical stroke inclines to the right at the bottom and sometimes to the left; in other examples it is perpendicular. The horizontal stroke extends slightly to the right of the vertical in Nos. 1, 8, 23, and 36, as it does in some of the examples of Sam.
- d. The d most generally has a slight tail to the right, as in Sam., Sil., and Lach. However, in Nos. 14 and 54, the tail is extended so that the letter appears as an r.
- h. The variation in the stance of the h of Nos. 1 and 18 is probably to be explained as due to the uneven writing surface of the jar handle. The h normally has three horizontal strokes; however, in Nos. 35, 38, 39, 41, and 42, only two strokes have been employed. In these cases the scribe generally has been consistent, in that when he made an h, as in four examples, he also used only two horizontals for that letter.
- w. The w's are usually long, extending either above or below the other letters. The best formed examples (Nos. 1, 5, 22) are similar to Sam., Sil., and Lach.
- z. This letter appears only 6 times on the handles, and in each case it consists of two parallel horizontal lines, unconnected by the usual vertical stroke. Cf. Lachish Letter II, where the vertical is barely apparent, if it exists at all.
- h. This letter generally appears with three horizontal strokes, but in Nos. 35, 38, 39, 41, and 44 there are only two. In all of these, except in No. 44, the scribe has consistently written the h with two horizontals. A similar variation in the h occurs in Sam. and JS.
- y. The horizontal cross-stroke in the middle of the y sometimes extends to the right of the vertical (Nos. 5, 15, 39) as in Lach. Otherwise the letter conforms to the general pattern of Sam., Sil., and JS.
- l. The l in No. 26 has the sharp angle of Lach. and some JS. In No. 28 and in the two l's used as word dividers in No. 51, however, the hook is rounded, as in Sam.
  - m. The m, which appears in only 8 instances, seems to be more like the form of Lach. and JS.

- n. This letter, like the m, frequently has a long tail, which is either bent back sharply to the left (Nos. 8, 27, 29, 31, 33, 34, 37, 40, 42, 44-46, 48, 55), or joined with the following letter to form a ligature (Nos. 18, 22, 36, 43). The closest parallels are Sam. and JS. Yet the cursive flourish which is characteristic of our examples is without any exact parallel.
- ayin. The ayin tends to be round and closed, except for No. 25, which is slightly open. The first ayin in No. 1 and those in Nos. 6 and 28 are a half circle and similar to Lach. A triangular form occurs in Nos. 21, 23, 30, and 31.
  - r. See discussion under gdr above.
  - š. Appears only in No. 21, where it is the normal form found in Sam., Sil., Lach.

In view of the fact that our materials are graffiti and cannot easily be compared with monumental inscriptions, ostraca, and seals, our conclusions must be provisional. If we allow for a range of two or even three generations for the inscribing of the jar handles, it is safe to place most of the material, with the possible exception of the  $dml^2$  handles, within the period extending from the Siloam inscription down to the Lachish Letters, or roughly from the beginning of the seventh century down to the first part of the sixth. The problem of the paleography of the  $dml^2$  material is difficult because of the aleph of Nos. 21 and 22, for which there seems to be no available parallel.

Proper Names. As we have seen in the section on individual words, the name Azariah seems to have enjoyed a wide popularity from the eighth century down through the late biblical period. Amariah is a name borne by the great-grandfather of Zephaniah, who lived in the last part of the seventh century (Zeph. 1:1), and appears in the post-exilic list of Chronicles and Ezra. Hananiah, however, is a name which first appears in the Bible at the latter part of the seventh century and does not appear in any biblical writings before this time. The appearance of Neriah, the equivalent of our  $nr^2$ , in the book of Jeremiah—and limited to that book—adds weight to the other evidence from the use of proper names.

Although the evidence for date which is supplied by an examination of the four possible criteria is by no means decisive, it is sufficient to place the upper limit of probability at the beginning of the seventh century and the lower limit at the Exile, with the possibility of an extension of the  $dml^2$  inscriptions, with their paleographic peculiarities, into the exilic period.

#### CONCLUSIONS

Before setting forth some tentative conclusions about how the jars were used, it is necessary to mention the discovery of some other objects found in the same context of the debris of the pool. One is a clay funnel, (Field No. 431), found in layer  $6.50-6.60\,\mathrm{m}$ . (Fig. 6:20). Although the top is broken, enough is preserved to indicate that it is roughly parallel to the funnel found at Tell en-Nasbeh (TN, Vol. 2, Pl. 77:1776). When the funnel was placed in the mouth of jar No. 32, it was found to fit perfectly, as though it had been made especially for filling the jars (see Fig. 12:1 for a photograph of the funnel in the mouth of No. 32). The other discovery is that of more than 40 clay stoppers, also of a size which fits the mouth of the jars (see Fig. 6:16=Field No. 281, 6:17=Field No. 280, 6:18=Field No. 282, 6:19=Field No. 308 for drawings; Fig. 12:3 for a photograph of stoppers; Fig. 12:2 for a stopper in the mouth of No. 32). Although there are no

string marks on the tops of the stoppers—they were baked before they were used—it is obvious that a string placed through the two handles of the jar and over the top of the stopper would serve to hold it firmly in place. The stopper with a groove for the string found at Gezer (Gezer, Vol. 3, Pl. 191:13) suggests that this method was used to hold a stopper firmly in place. The association of stoppers with the remains of the jars within the same deposit of debris and the correspondence in size of the mouth of the jars and the beveled portion of the stoppers make inescapable the conclusion that the stoppers must have been intended for the jars.

Jars with such a relatively small mouth could only have been intended to contain a liquid, such as water, oil, or wine. It seems unlikely that water jars should have been labeled and equipped with stoppers; it is more probable that the labeled jars were intended to contain some more costly liquid. While they could have been used for either wine or oil, the use of the word gdr in the standard form of the label, with its well-attested biblical association with vineyards, seems to tip the scale of probability in favor of wine as the product for which they were intended.

The use of the name Gibeon suggests that the wine was bottled for export and not for domestic consumption, in Gibeon, where the name would have served no good purpose.

There are two possibilities as to the purpose of the labels on the jars. The inscription, with the name of the town and the maker of the wine, may have been intended to assure the consumer in another town of the quality of the product. This explanation assumes, of course, that Gibeon enjoyed a reputation for its good wines and that the names of Azariah, Amariah, Hananiah  $nr^2$ , and  $dml^2$  were also sufficiently well known to have had some commercial value in the surrounding districts where the product was marketed. Another possibility is that the address and the name were written on the jars to facilitate the return of the containers when the contents had been consumed. If this is the correct explanation, then only the content of the jar was sold and the jar was eventually returned to the proper individual at Gibeon. The theory that the inscriptions were a means for identifying returnable containers seems to be the more tenable-one.

What was the relationship, if any, between the four individual proprietors of the vineyards, Azariah, Amariah, Hananiah  $nr^2$ , and  $dml^2$ ? Azariah may be clearly distinguished from Amariah by the style of the letters which he or his scribe made. A further difference is the practice of Azariah of writing across the mouth of the vessel, on to the second handle. All the inscriptions of Amariah seem to have been contained on one handle, although no second handle is attached to any of the Amariah inscriptions. Furthermore, the practice of Hananiah  $nr^2$ , as it is known from No. 32, was again different, in that he wrote up one handle, turned the jar around and continued his inscription as he wrote from the bottom of the second handle upward toward the neck. It is impossible to tell if these three individuals, each with his own distinctive way of inscribing the jar handles, were contemporaries, each owning a separate gdr in the vineyard of Gibeon, or if they were successive owners of a particular business which enjoyed a considerable reputation through several generations. If we accept the theory that the names were for the purpose of identifying returned jars, then it is quite possible that the three individuals were contemporaries.

The chronological relation of  $dml^2$  to the other three names is complicated by the almost certain join of Nos. 21 and 22. Here we seem to have four names:  $dml^2$ ,  $\check{s}b^2l$ , Hananiah,  $nr^2$ . If we consider the last three as patronymics of  $dml^2$ , then  $dml^2$  is the grandson of the well-known vine-yard owner Hananiah  $nr^2$ . Admittedly the custom of giving three patronymics is unusual. There are cases of Zephaniah (Zeph. 1:1), who gives the names of three of his ancestors, and of

Zechariah (Zech. 1:1), who lists two. If  $dml^3$  was the grandson of Hananiah  $nr^3$ , then it would be understandable that he might have found the listing of the name of the successful business of his grandfather a commercial advantage. The hypothesis that  $dml^3$  was two generations later than Hananiah  $nr^3$  would explain the departure in Nos. 21 and 22 from the usual convention in writing the aleph. If the writing of the Azariah, Amariah, and Hananiah  $nr^3$  handles is to be placed in the seventh century, then the grandson of Hananiah  $nr^3$  might well belong to the exilic period and the script which he employed might reflect the degeneration of the well-established canons of writing which took place after the fall of the Judaean state.

Finally we come to the question of the location of Gibeon. Professor Karl Elliger, on the basis of two preliminary reports of the excavation, has raised the question as to whether the appearance of "Gibeon" on the handles found at el-Jib may not in fact indicate that the location of this biblical city is to be sought elsewhere (Zeitschrift des Deutschen Palästina-Vereins, Vol. 73, 1957, pp. 129-132). The site of el-Jib might be the destination of the jars which had been sent from Gibeon. Although the fixing of the location of Gibeon must take into account all the references in literary sources (this treatment is planned in a subsequent monograph in this series of reports) as Elliger properly suggests, there exists in the evidence now available from the excavations at el-Jib a remark ably strong case for the Gibeon = el-Jib equation. There are several indications that the site of el-Jib was the point of origin rather than the destination for the jars inscribed with "Gibeon."

The great number of inscribed jar handles found at el-Jib is difficult to account for on the basis of importation, especially in the light of the absence of any jars marked with other place names. The assumption that these jars came from another site, where Gibeon is to be located, would imply that this supposed Gibeon had a monopoly on the trade in imported wine at el-Jib and that the jars when emptied of their contents were not returned to the winemaker. In the light of the large number of marked handles it is much more likely that the debris in the pool was from an area of the town in which the wine was made and bottled or from a storehouse where the empty jars were returned and stored after their contents had been consumed in neighboring towns. This theory also accounts for the complete absence of these jar handles at such well excavated neighboring sites as Tell en-Nasbeh, Gezer, Ain Shems, and Tell el-Ful.

The finding of the funnel, mentioned above, in the context of the jar handles suggests that it too was a part of the equipment of the winery at el-Jib. The composition of the clay and the firing of the funnel are so similar to those of the Gibeon handle No. 32, that it is difficult to escape the conclusion that it was made by the same potter and for the express purpose of filling the wine jars. This correspondence is strengthened by my examination of the fragment of a similar funnel found at Tell en-Nasbeh, which is markedly different in texture and color from our funnel and jar handles.

# JAR HANDLES WITH THE ROYAL STAMP

#### ANALYSIS OF TYPES

A total of 80 jar handles stamped with the *lamelekh* or "royal" seal came from the excavations of 1956 and 1957. The general types to which these impressions belong are well known and have been described and discussed fully (see D. Diringer, *Iscrizioni*, pp. 117-118; S. Moscati, pp. 83-98; Diringer, *PEQ*, Vol. 73, 1941, pp. 89-109; Diringer, *Biblical Archaeologist*, Vol. 12, 1949, pp. 70-86; Diringer, in *Lachish III*, pp. 342-347; C. C. McCown, *TN*, Vol. 1, pp. 156-161). The new material from el-Jib fits into the well established categories of Types I, II, and III and the script corresponds to that of these well-known types. In the Catalogue (pp. 23-26) we have listed the stamp impressions according to types and place names and have illustrated on Figs. 10 and 11, some of the best preserved examples.

In general the stamped impressions are of two kinds. Twelve bear the symbol of the four-winged scarab or beetle (Diringer's Types I and II). Among these are examples of the lmlk above the figure and of all the known place names—Hebron,  $mm\check{s}t$ , Socoh, and Ziph—either complete or with enough preserved to make identification certain, written below the four-winged figure. On 68 handles there appears the two-winged symbol(Type III), which has been interpreted as a winged sun-disc or a flying scroll. In addition to the lmlk above the symbol there are numerous examples of each of the four place names mentioned above.

Seventy-five of the 80 handles came from the debris of the pool. Three of these came from unrecorded depths; the remaining 72 were found between  $2.10\,\mathrm{m}$ . and  $13.50\,\mathrm{m}$ . from the rim of the pool. The provenience of the impressions of the four-winged beetle (Types I and II) was restricted to a layer of debris extending from  $5.00\,\mathrm{m}$ . to  $10.30\,\mathrm{m}$ . The deposit which produced all the examples of Types I and II was also the source for 50, or 83.3%, of the stamps of Type III. It is impossible solely on context to draw any conclusions as to the chronological difference between Types I and II on the one hand and Type III on the other. A comparison of the layer in which the inscribed wine-jar handles were found with that which produced the lamelekh handles reveals that 31 of the latter, or 43.1% of those whose provenience is known, came from a context of debris lying below that containing the inscribed handles. Since, as we have stated above, the filling of the pool seems to have been done at one period of rebuilding in the town, this difference in context may indicate that the royal handles were distributed over a wider area of the town than were the inscribed wine-jar handles.

All the royal handles are in Philadelphia at the University Museum with the exception of Nos. 335, 482, 515, 499, 532, 531, 563, and 412, which are in Amman, and Nos. 318 and 368, which were lost in shipment from Jerusalem.

The handles on which these impressions appear are generally reddish brown in color; a few are a darker brown. When viewed in cross section the handles are a long oval (see Fig. 8 B for

Analysis	of	lamelekh	Stamps	from	el-Jib

Place name	Type I	Type II	Type I or II	Type III	To tal
Hebron		1		11	12 15.0%
mmšt	2			6	8 10.0%
Socoh		1		9	10 12.5%
Ziph	1			8	9 11.3%
Uncertain	1	4	2	34	41 51.2%
Totals	4	6	2	68	80

# Distribution of 404 lamelekh Stamps with Legible Place Names

	Tell ed-Duweir	Tell en-Nasbeh	Ain Shems	Shephelah	el-Jib
Hebron	198 74.7%	13 36.1%	12 92.3%	12 23.5%	12 30.8%
mmš t	8 3.0%	10 27.8%	1 7.7%	10 19.6%	8 20.5%
Socoh	40 15.1%	4. 11.1%		20 39.3%	10 25.6%
Ziph	19 7.2%	9 25.0%		9 17.6%	9 23.1%
Totals	265	36	13	51	39
Type I	34 12.8%	3 8.3%	L 11 04 600	L 04 47 000	3 7.7%
Type II	191 72.1%	5 13.9%	11 84.6%	24 47.0%	2 5.1%
Type III	40 15.1%	28 77.8%	2 15.4%	27 53.0%	34 87.2%
Totals	265	36	13	51	39

(Note: The figures in the above table for Tell ed-Duweir and for the Shephelah mounds (Sandaḥannah, Judeideh, Ṣâfī, and Zakarīyeh) are taken from Diringer's chart in *Lachish III*, pp. 346-347; for Tell en-Nasbeh, from *TN*, Vol 1, p. 161; for Ain Shems, from E. Grant and G. E. Wright, *Ain Shems Excavations*, V, p. 84.)

drawings) and frequently have two ridges separated by a shallow, central depression (Fig. 8:292). In no case do we have the kind of high, central ridge which is shown from Tell en-Nasbeh (TN, Vol. 1, p. 157, Fig. 37:D. M. 1471).

The beetle symbol of Types I and II is always stamped longitudinally on the handle, with the tips of two wings extending upward and the tips of the other two extending downward on the handle. The head of the beetle is toward the top of the handle, except in the case of No. 509, where the

stamp is obviously upside down. The impression of two-winged figure of Type III is usually placed so that the longer axis of the oval seal corresponds to the longer, vertical axis of the surface of the handle. In 13 of the 68 examples of the two-winged symbol, the impression was made diagonally, or slightly off the vertical axis. In only one case, No. 293, the impression was made so that the wings spread across the width of the handle. The head of the winged figure extends toward the right side of the handle in approximately half of the examples and toward the left in about an equal number of cases.

#### CONCENTRIC CIRCLES

On 18 of the handles bearing the lamelekh stamp-22.5% of the total-there appear two concentric circles incised around a small hole which was drilled in the center. This symbol was not stamped on the wet clay, as is commonly stated or implied in the descriptions of previously discovered examples, but was incised with a sharp instrument after the jar had been fired. The marking was obviously done by a compass with a fixed radius. First a hole was drilled to serve as a pivot; then one point of the compass was placed in the hole and a circle scribed; a second compass with a longer radius was then inserted in the hole and another circle scribed. While this method seems best to account for the differences between the radii of the two circles, it is possible that both circles may have been made at the same time by means of a die or fixed compass with two points and a pivot. The central hole was invariably drilled deeper than the impressions of the two circles. The diameters of the outer circles vary from 19 mm. to 12 mm.; the diameters of the inner circles, from 12 mm. to 8 mm. Measurements of the diameters of the two circles are as follows:

Field No.	Diameters in mm.	Type	Place name
357	19 10	III	
522	18 11	III	$mm\check{s}t$
354	18 10	I or II	1111100
411	18 ?	Ш	
356	17 12	III	Hebron
409	16 10	III	Socoh
75	16 12	III	bocon
491	15 10	II	
500	15 9	III .	Ziph
269	15 10	III	. Zipii
398	15 10	III	
4 17	14 9	IΠ	Socoh
490	14 8	III	Ziph
415	13 9	III	Socoh
418	12 9	III	200011
318	(lost)	III	
499	(Amman)	III	×
412	(Amman)	III	$mm\check{s}t$
	(	***	

In addition to the handles which contain both the royal stamp and the incised concentric circles there are numerous handles and fragments of handles which contain only the concentric circles. Some of the fragments could have been from handles with the royal stamp; however, three complete handles with the concentric circles were found to be without any trace of the lamelekh stamp. In each of these three cases the handle bore an unmistakable similarity to the type generally associated with the lamelekh jars. Thus, they could have belonged to jars which bore the royal stamp on another handle. The measurements of the diameters of 15 examples of the concentric-circle symbol on handles or fragments without the accompanying royal seal are given below:

Field No.	Diameters	in mm
300	20	13
95	20	9
338	19	12
120	18	12
119	18	12
302	17	10
301	17	12
78	17	11
270	16	11
340	15	9
108	15	10
339	14	9
215	14	9
112	. 14	9
107	13	9

A comparison is given below of the handles with both concentric circles and lamelekh stamps from el-Jib with those from Tell en-Nasbeh:

# Concentric Circles on lamelekh-stamped Jar Handles

el-		h

01 110						
	Hebron	mmšt	Socoh	Ziph	Uncertain	Total
Type II			ŕ		1	1
Type I or II					1	1
Type III	1	2	3	2	8 .	16
Total	1	2	3	2	10	18
Tell en-Nasbeh						
Type III	1	3		6	7	17

Only 2 of the 310 lamelekh stamps reported from Tell ed-Duweir were found on handles which also bore the concentric circles and both of these belonged to Class III (PEQ, Vol. 73, 1941, p. 99; and Lachish III, p. 343; Diringer describes the concentric circles as an impression or a stamp). Two other handles at Tell ed-Duweir bore only the concentric circles, with diameters of 20 mm. and 11 mm. respectively (PEQ, Vol. 73, 1941, p. 99). Macalister reported that at Gezer he found handles bearing the royal stamp and "in addition a stamp consisting of the concentric circles and a central dot" (Gezer, Vol. II, p. 210). Of the 8 royal stamps recovered from Jerusalem by Wilson and Warren, one at least had in addition the mark of the concentric circles (C. W. Wilson and Capt. Warren, The Recovery of Jerusalem, 1873, p. 118-119, where an example of Type III-Zioh-is drawn). At the Shephelah mounds a handle with Type III seal and concentric circles was found (F. J. Bliss and R. A. S. Macalister, Excavations in Palestine during the Years 1898-1900, 1902, p. 118, and P1. 56:18). One, at least, of the 11 examples of the Type III handles from Beth-zur has the circle design (O. R. Sellers, The Citadel of Beth-zur, 1933, p. 52-53, Fig. 44). One of the two lamelekh handles found in the excavation of Ramath Rahel contains the concentric circles (Y. Aharoni, Israel Exploration Journal, Vol. 6, 1956, Pl. 25:3, p. 144; the symbol is described as a "stamp").

It is apparent that concentric circles appear along with royal stamps at most of the sites from which the royal stamps have come. The frequency of their appearance is much greater at the two sites of el-Jib and Tell en-Nasbeh, where they appeared on 22.5% and 19.8% of the royal handles respectively, than it is in the south at Tell ed-Duweir, where the circles appear on less than one per cent of the total number of royal stamps found. The greatest frequency of appearance is with the Type III stamp, although two examples of the concentric circles with the four-winged beetle appeared.

Although the meaning of the concentric circles is not yet apparent, the evidence now available is sufficient to limit the range of possibility. The mark was not a potter's mark, since it was placed on the handle after the jar was fired. The potter would have placed his mark on the handle before firing, just as he did in the case of the accompanying lamelekh-seal impression. The possibility that the mark is an owner's mark may be ruled out because of the wide distribution of the symbol at a number of sites from Tell ed-Duweir in the south to Tell en-Nasbeh in the north. It is unlikely that the jars of one individual or family would have been so widely scattered. Furthermore the high percentages of royal stamps with the concentric circles at el-Jib and at Tell en-Nasbeh render this explanation implausible. It is now apparent too that ownership was marked at el-Jib by incising the name on the handles of jars. The possibility that this symbol was merely a decorative one is quite nicely ruled out of possible consideration by one of the examples from el-Jib, where the concentric circles are almost completely effaced. Someone had taken pains to remove the circles which accompanied the royal stamp (No. 411).

With the elimination of these possibilities we propose tentatively three possible explanations for the use of the symbol of the two concentric circles. It could have been applied as a cancellation of the royal stamp. While the usual place for the symbol on the handle is between the royal stamp and the junction of the upper part of the handle with the body of the jar, there are 6 examples from el-Jib on which the concentric circles intersect the oval of the royal stamp (Nos. 418, 398, 357, 409, 500, and 411). If the lamelekh seal denoted royal ownership of the jar, it is possible that the incised circles signified that the jar was no longer royal property and could be used for private purposes. A second possibility is that this mark was some kind of mark or receipt and indicated that its contents had been received or paid for. Yet a third possibility is that the symbol was a mark

indicating that the capacity of the vessel had been officially attested. If the royal stamp is a mark denoting capacity it could only have been roughly accurate since it was placed on the jar before it was fired and consequently before its contents could be tested. According to this explanation the incised mark would have indicated that the jar had been tested after firing and found to be of the correct capacity. In favor of this explanation is the observation that the mark, unlike other owner's marks found on handles, is difficult to duplicate without a rather well-made compass of metal. The solution to this problem will probably have to wait until the related problem of the meaning and use of the royal stamp is solved. However, there is now sufficient evidence to show that the two symbols are somehow closely related.

#### CONCLUSIONS

The discovery of 80 new lamelekh stamps at el-Jib does not materially change the picture of the possibilities of interpretation as presented by Diringer in 1949 (Biblical Archaeologist, Vol. 12, 1949, pp. 79-86). The significance of the distributions of both place names and types in the material from Tell en-Nasbeh is given added weight by the new finds at the neighboring site of el-Jib. The only significant difference in the distribution of place names in our material is the increase in the number of stamps with the name Socoh. At Tell en-Nasbeh 11.1% bore this name; at el-Jib, 39.3%. Other averages of frequency of place names are more constant. The percentage of Type III examples at el-Jib is higher by almost 10% than that at Tell en-Nasbeh.

When the two neighboring sites of el-Jib and Tell en-Nasbeh are compared with Tell ed-Duweir there is a marked contrast, especially in the frequencies of Types I and II as compared with Type III. At Tell ed-Duweir only 15.1% of the handles have the double-winged symbol of Type III; but at Tell en-Nasbeh there are 77.8% and at el-Jib, 87.2% of the total lamelekh seals have this symbol. If the difference between Types I and II on the one hand and Type III on the other is a chronological one, as Diringer and others have maintained, largely on the ground of the script employed, then it follows that Tell en-Nasbeh and el-Jib reached a peak of economic importance and perhaps of population after Lachish had passed its peak. It is, of course, possible that the difference in the frequency of the two- and the four-winged symbol may be explained on geographical rather than on chronological grounds.

### CATALOGUE

Field No.	Type I	Depth		
		~ 00 <b>~ 0</b> 0		
335	lmlk mmšt	5.00-5.30 m.	Amman.	
483	zyp/	7.60-7.80 m.	Figs. 8A, 9.	
515	lmlk	8.80-9.00 m.	Amman.	
523	lmlk mmšt	9.00-9.80 m.	Figs. 8A, 9.	Size: 28 by 20 mm.

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Type II
336
                                  5.00-5.30 m.
                                  5.30-5.80 m. Fig. 8A.
353
                                  7.30-7.60 m. Fig. 9. Amman.
482
            \dots hbrn
            lmlk \dots
                                  7.60-7.80 m. Circles, d.: 15, 10 mm.
491
509
            .... šw..
                                  8.30-8.80 m.
            lmlk \dots
                                 10.00-10.30 m. Figs. 8A, 9.
542
            Type I or II
354
                                  5.30-5.80 m. Circles, d.: 18, 10 mm.
455
            lml....
                                  6.60-7.30 m.
            Type III - Hebron
123
            lm. . hb. .
                                  Pool.
145
            \dots hbrn
                                  Dump. Fig. 9.
356
            lmlk ..rn
                                  5.30-5.80 m. Circles, d.: 17, 12 mm.
397
            lmlk hbrn
                                  5.80-6.50 m.
416
            lmlk .brn
                                  6.50-6.60 m.
456
            lmlk hbrn
                                  6.60-7.30 m. Fig. 8A.
457
            .m. . hbr.
                                  6.60-7.30 m.
498
            lmlk ..rn
                                  7.80-8.30 m.
521
            \dots hbrn
                                 9.00-9.80 m. Figs. 8A, 9.
555
            .m.k hb..
                                 10.70-11.80 m.
                                 11.80-13.50 m. Amman.
563
            lm. . hb. .
            Type III - mmšt
106
            .m. . mmšt
                                  2.50 m.
            ..lk mmšt
486
                                  7.60-7.80 m. Fig. 9.
            lmlk mmšt
487
                                  7.60-7.80 m. Figs. 8A, 9. Size: 30 by 19 mm.
            lmlk mmšt
499
                                  7.80-8.30 m. Fig. 9. Circles. Amman.
            . .lk mmšt.
520
                                 9.00-9.80 m.
                                 9.00-9.80 m. Circles, d.: 18, 11 mm.
522
            .... mm..
            Type III - Socoh
146
            lmlk ..kh
                                  Dump. Fig. 9. Size: 30 by 19 mm.
293
            lmlk šw. .
                                  4.45-4.60 m.
409
            .mlk šwkh
                                 6.50-6.60 m. Fig. 9 Circles, d.: 16, 10 mm.
            lm.k šwkh
415
                                 6.50-6.60 m. Circles, d.: 13, 9 mm.
            \dots k šwkh
417
                                 6.50-6.60 m. Circles, d.: 14, 9 mm.
```

```
454
            lmlk šwkh
                                  6.60-7.30 m. Fig. 8A. Size: 30 by 19 mm.
485
            lm.k šwkh
                                  7.60-7.80 m. Fig. 9. Size: 31 by 20 mm.
532
             ..lk..kh
                                  9.80-10.00 m. Amman.
541
             lm,k šwkh
                                 10.00-10.30 m.
             Type III - Ziph
367
             ...k.p
                                  5.30-5.80 m.
480
            lmlk zp
                                  7.30-7.60 m. Figs. 8A, 9. Size: 29 by 19 mm.
489
             .m.k zp
                                  7.60-7.80 m.
490
            lmlk z.
                                  7.60-7.80 m. Fig. 9. Circles, d.: 14, 8 mm.
500
            ..lk zp
                                  7.80-8.30 m. Fig. 12:5. Circles, d.: 15, 9 mm.
507
            lmlk z.
                                  8.30-8.80 m.
531
            lm..zp
                                  9.00-10.00 m. Amman.
540
            lmlk zp
                                 10.00-10.30 m.
             Type III
 75
                                  I M, 0.50 m. Circles, d.: 16, 12 mm.
 79
                                  4.00-4.30 m.
             .m. .
                                  II AB 2, 1.42 m.
105
            lml.
118
                                  Pool.
124
             . .l.
                                  Dump.
216
                                  Pool.
            , mlk
                                  2.10 - 3.00 \,\mathrm{m}
253
267
                                  3.50-4.45 m.
            lmlk
268
                                  3.50-4.45 m.
                                  3.50-4.45 m. Circles, d.: 15, 10 mm.
269
            .ml.
                                  4.45-4.60 m.
294
             . .l.
318
                                  4.60-5.00 m. Circles, Lost.
            lmlk
                                  5.00-5.30 m.
337
355
                                  5.30-5.80 m.
357
                                  5.30-5.80 m. Circles, d.: 19, 10 mm.
                                  5.30-5.80 m. Lost.
368
            lml.
                                  5.30-5.80 m.
369
                                  5.80-6.50 m. Circles, d.: 15, 10 mm.
398
                                  6.50-6.60 m. Circles partly effaced; d.: 18 mm.
411
                                  6.50-6.60 m. Circles. Amman.
412
             ...k
                                  6.50-6.60 m.
413
                                  6.50-6.60 m.
414
             .m.k
                                  6.50-6.60 m. Circles, d.: 12, 9 mm.
418
            lmlk
453
                                  6.60-7.30 m.
                                  6.60-7.30 m.
458
                                  6.60-7.30 m.
459
                                  7.30-7.60 m.
481
             .m. .
                                  7.60-7.80 m.
```

484

. . . k

488	lmlk	7.60-7.80 m.
501	.m	7.80-8.30 m.
502		7.80-8.30 m.
508		8.30-8.80 m.
514	.mlk	8.80-9.00 m.
530	lmlk	9.80-10.00 m. Figs. 8 A, 9.

## PRIVATE SEAL IMPRESSIONS AND THE INSCRIBED WEIGHT

Seven double-line private seal impressions and one single-word post-exilic impression were found in the debris which had been filled into the pool. The 7 private seal impressions were distributed between the depths of  $6.50 \, \text{m}$ , and  $11.80 \, \text{m}$ ; the  $m \, \text{s} \, h$  impression came from a depth of  $2.30 \, \text{m}$ . All but one of the private seals came from layers of debris below those in which the inscribed wine-jar handles were found.

The handles on which the private seals were impressed are in general similar to those on which the royal seals were stamped. The color is generally reddish brown and the two-ribbed variety predominates. White grits are common, as can be seen from the photographs on Fig. 11. The msh impression, however, is on a handle of well baked and well levigated clay, having a single, central ridge.

Photographs of the impressions listed in the following catalogue appear on Fig. 11 and drawings on Fig. 10. The figure numbers on both of these plates correspond to the catalogue numbers given below. The inscribed weight is shown on Fig. 12: 6, 7.

### CATALOGUE

 mṣh.
 2.30 m. Single-ridge handle; buff clay, well baked, dark grits. 16 by 21 mm. Field No. 96. Phila.

Twenty-eight examples of this post-exilic impression were found at Tell en-Nasbeh and one at Jericho (TN, Vol. 1, pp. 165-167, Pl. 56: 15-28). See also Diringer, Iscrizioni, p. 140-141, Pl. 17: 3, 5, 6. H. L. Ginsberg suggests that  $m \circ h$  is an abbreviated form of  $m \circ h$  (BASOR, 109, pp. 21-22). For new light on  $m \circ h$  see N. Avigad,  $Israel\ Exploration\ Journal$ , Vol. 8, 1958, pp. 113-119.

2. lnhm

hşlyhw 8.30-8.80 m. Double-ridge handle; reddish brown clay with white grits; dark in section. 10 by 12 mm. Field No. 510. Phila.

The inscription seems to be identical with one found at Tell ed-Duweir (PEQ, Vol. 73, 1941, pp. 48–49, Pl. 4: 3;  $Lachish\ III$ , p. 341, Pl. 47 B: 3). Albright proposed vocalizing the Lachish impression: "Naḥūm (son of) Hissilyāhū" (BASOR, 86, p. 26). The name hslyhw appears in Lachish Letter I: 1 ( $Lachish\ III$ , p. 331). See also E. L. Sukenik, PEQ, Vol. 74, 1942, p. 57, who corrects Diringer's first reading. The biblical name Nahum (Nahum 1: 1; Neh. 7: 7) also appears on seven impressions of a rectangular seal at Tell ed-Duweir with the inscription,  $lnhm\ ^cbdy\ (PEQ$ , Vol. 73, 1941, pp. 44–45, Pl. 3: 10–11;  $Lachish\ III$ , p. 341, Pl. 47 B: 10, 11). One of these impressions was found in a room at Tell ed-Duweir which is said to have been destroyed by fire about 597 B. C. Another example of this same seal is in the Jerusalem Museum (Diringer, Iscrizioni, pp. 124–125, Pl. 14: 9). The name nhm (in the Bible as Nahum, Naham, and Nehum) is probably a hypocoristic form for the theophoric name with the verb nhm (see M. Noth,  $Die\ israelitischen\ Personennamen$ , p. 175).

3. ltnh

m/ngb 8.60 m. Two-ribbed handle; reddish brown clay with white grits. 9 by 10 mm. Field No. 219. Phila.

Impression is identical with one found in Stratum II at Ain Shems (E. Grant and G. E. Wright, Ain Shems Excavations, V, pp. 83-84, No. 9, Fig. 10 b: 9; Moscati, p. 75, Pl. 16: 7). Compare size, shape of border, and an engraver's slip at the lower right of the border; both impressions were doubtlessly made by the same seal. The Tanhûm is common in post-biblical literature (see J. A. Thompson, BASOR, 86, p. 24, for examples and references). Seven seal impressions with ltnhm mgn were found at Tell ed-Duweir (PEQ, Vol. 73, 1941, p. 41-42, Pl. 3: 7; Lachish III, p. 341, Pl. 47A: 7; Moscati, p. 76). See also Diringer, PEQ, Vol. 75, 1943, p. 55.

4. [spn c]

zry~[hw] 6.50-6.60 m. Pinkish brown clay with many white grits, black core, pink on inside. Field No. 410. Amman.

Reconstruction is on the basis of three stamps found at Tell ed-Duweir (PEQ, Vol. 73, 1941, pp. 38-40, Pl. 3: 1, 2;  $Lachish\ III$ , p. 341, Pl. 47 A: 1, 2). Another occurrence of Azariah, but on the upper line, is at Tell en-Nasbeh (TN, Vol. 1, p. 162-163, Pl. 57: 10), where there appears "Azariah (son of) Mattaniah?". See also PEQ, Vol. 68, 1936, p. 188; Vol. 70, 1938, p. 190-191. Two horizontal lines intersected by a vertical (owner's mark) have been incised on the handle after firing.

5. lmšl

 $m^2 lntn$  9.00-9.80 m. Reddish brown clay, dark core, with white grits. 12 by 14 mm. Field No. 525. Phila.

Although the first two letters of the upper line are indistinct on this impression they are quite clear on No. 6, which seems to have been made by the same stamp. The name Meshullam appears frequently in the books of Ezra, Nehemiah, and Chronicles, and once in II Kings 22: 3 as the grandfather of Shaphan the scribe. The name appears on seven stamps from Lachish— $mšlm^2 hmlk$ —(PEQ, Vol. 73, 1941, p. 41, Pl. 3: 4-6; Lachish III, p. 341, Pl. 47 A: 4-6; Lachish III, p. 341, Pl. 47 A: 4-6; Lachish III p. 76) and on two seals listed by Diringer (Lachish III, p. 212, Pl. 20: 25). The name Elnathan appears in the Bible for two persons who lived in the 7th—6th centuries (II Kings 24: 8; Jer. 26: 22; 36: 12, 25) and for three persons mentioned in Ezra 8: 16, along with Meshullam. See also Lachish Letter III: 15 (Lachish III, p. 332). A. Reifenberg acquired in Damascus a seal inscribed with Lachish III (A. Reifenberg, Lachish III), p. 34, No. 15).

6. lm [šl]

 $m^2l$  [ntn] 9.00-9.80 m. Reddish brown clay, black core, white grits. 12 by [14]mm. Field No. 526. Phila.

Impression of same seal as described in No. 5.

7.  $\dot{l}$   $\dot{n}$ ...  $\dot{n}$  9.00-9.80 m. Reddish brown clay, gray core, white grits. 12 by 12 mm. Field No. 524. Phila.

Impossible to decipher.

8. ltnhm

mgn 10.70-11.80 m. Two-ribbed handle; grayish brown clay, dark core, white grits. 12 by 12 mm. Field No. 554. Phila.

This impression seems to be identical with seven impressions found at Tell ed-Duweir (PEQ, Vol. 73, 1941, pp. 41–42, Pl. 3: 7;  $Lachish\ III$ , p. 341, Pl. 47 A: 7). The upper line is identical and the lower, although poorly impressed, seems to fit the pattern of the examples from Tell ed-Duweir. The name Tanhum has been discussed under No. 3. Diringer takes mgn to be an abbreviation for a theophoric name compounded with magen, "defense, protection," i. e., "(God) is defense." J. A. Thompson suggested in BASOR, 86, pp. 24–25, that the g is a t, but this does not seem likely from our impression, nor was it acceptable to Diringer (PEQ, Vol. 75, 1943, p. 55).

#### INSCRIBED WEIGHT

The dome-shaped weight, Field No. 257 (Fig. 12: 6, 7) was found in the pool at a depth of 2.10-3.00 m. and is now in Philadelphia. Its weight is 51.585 gr.; height, 29 mm.; width, 35 mm.; diameter at base, 27 mm. The stone, which is buff in color with a pinkish tinge in spots, has been cracked in a number of places, perhaps by fire. Incised in the top of the weight are two symbols: an X with a cross-bar at the bottom, and, to the left of it, an angular mark similar to the archaic Hebrew g. Both marks are known from other weights which have been discussed fully (for most recent discussions see: A. G. Barrois, Revue biblique, Vol. 41, 1932, pp. 63-64; A. G. Barrois, Manuel d'archéologie biblique, Vol. 2, 1953, pp. 256-258; J. Trinquet, Supplément au dictionnaire de la Bible, Vol. 5, col. 1246; D. Diringer, PEO, 1942, pp. 82-103; D. Diringer, Lachish III, pp. 352-355; S. Moscati, pp. 99-105). The X-sign with the closed bottom (or top) has been provisionally interpreted as the symbol for the standard shekel (D. Diringer, Lachish III, p. 352). An intriguing suggestion for the origin of the sign has been made to me by Professor R. B. Y. Scott, who remarked that it might be merely a picture of a money- or weight-bag tied in the middle. We do know that weights were carried in a bag from references in Deut. 25: 13, Prov. 16: 11, and Mic. 6: 11. The sign appears in two forms, one with a rounded bottom, as in Lachish III, Pl. 51: 2 and 6 (the sign on P1. 51: 4 is a variant of this) and the other and more common form with angular corners at the bottom of the mark. In either case the picture fits what must have been the appearance of the Hebrew kys "bag" when tied with a string at the middle.

There are 4 weights which bear marks which are similar to those on our example:

Weight 46.0 gr.	Place Jerusalem	Publication Zeitschrift des Deutschen Palästina-Vereins,		
		Vol. 5, 1882, pp. 373-374, Pl. 10 H.		
45.5 gr.	Zakarîyeh	F. J. Bliss and R. A. S. Macalister, Excavations in Palestine, 1902, pp.145-146.		
44.6 gr.	Zakarîyeh	Ibid.		
46.6 gr.	Gerar	F. Petrie, Gerar, 1928, p. 26, Pls. 17: 54, 68. In this example the X is upside down.		

Among the 6 X-marked weights from Tell ed-Duweir, there are 2 which seem to have the g-mark (weights Nos. 2 and 7, shown in *Lachish III*, Pl. 51: 2 and 6) but these weigh 91.985 gr. and 88.645 gr.

respectively. Since they fall well within the range of the other 4 weights bearing the T-mark, it can be assumed that the mark is an error for a T.

The 4 previously discovered weights bearing the marking of the el-Jib weight range from 44.6 to 46.6 gr., with an average of 45.67 gr. Our weight of 51.585 gr. is approximately 13% more than this average—much too large a margin to be accounted for on the basis of error. It is probable that the el-Jib weight represents a different standard of metrology.

If we accept the prevailing interpretation that the g-mark represents the unit of 4 and the X-sign is the mark for the shekel, then the weight of the shekel according to the el-Jib standard is 12.896 gr. The 6 specimens of X-marked weights found at Tell ed-Duweir, if the accompanying mark represents 8 units, range for the unit of the shekel from  $11.08 \, \mathrm{gr.}$  to  $11.56 \, \mathrm{gr.}$ 

At Tell en-Nasbeh there was found a pym-inscribed weight of 8.591 gr. (TN, Vol. 1,  $\sigma$ . 276), which is considerably heavier than other known weights inscribed with pym. Calculating the pym as 2/3 shekel, the Tell en-Nasbeh weight yields a shekel of 12.885., which is remarkably close to our value of 12.896 gr.

If we consider 6 examples of pym weights, all of which are lighter than the Tell en-Nasbeh example (these 6 come from Jerusalem, Silwan, Gezer, Beth-zur, and Tell ed-Duweir; see Diringer, Iscrizioni, pp. 273-275, and Moscati, pp.102-103) they yield a value for the shekel of 11.436 gr., which is significantly below the heavy shekel of el-Jib and the value from the Tell en-Nasbeh pym.

It is tempting to conclude that the pym weight of Tell en-Nasbeh belongs to the same heavy standard as that of our 4-shekel weight found at the nearby el-Jib. Yet in the light of the great diversity of metrological systems which prevailed in ancient Palestine, it would be rash to press the point of this correspondence, which could indeed have been accidental.

The only other approximation of the heavy-shekel standard at el-Jib is to be seen in  $beqa^c$  weights. The average for the 7 examples cited by Diringer in  $Lachish\ III$ , p. 350, is 6.11 gr., which gives, on the basis of two  $beqa^c$  in one shekel, the average shekel weight of 12.22 gr., which is lighter by .676 gr. than the el-Jib standard.

# INSCRIBED MATERIAL LISTED ACCORDING TO FIELD NUMBERS

Field Number	Publication Reference	Assigned to	Field Number	Publication Reference	Assigned to
		mi	30 1	CC	Philadelphia
75	RS III	Philadelphia	302	CC	,,
78	CC	"	314	IJH 30	73
79	RS III	"	315	IJH 30 IJH 12	,,
95	CC	"	318	RS III	lost
96	PS 1		335	RS I	
97	IJH 18	Amman	336	RS II	Amman
98	10	Philadelphia	337	RS III	Philadelphia
99	IJH 40	,,	338	CC	,,
105	RS III	,,	339	CC	,,
106	RS III M		340		"
107	CC	,,	344	CC	"
108	CC	"		IJH 42	
112	CC	22	345	IJH 2	Amman
118	RS III	"	353	RS II	Philadelphia
119	CC	"	354	RS I or II	,,
120	CC	27	355	RS III	,,
123	RS III H	"	356	RS III H	
124	RS III	"	357	RS III	"
145	RS III H	"	358 A	IJH 14	**
146	RS III S	,,	359	ІЈН 9	***
215	CC	,,	360	ІЈН 5	"
216	RS III	"	361	IJH 55	"
217	IJH 56	Amman	362	IJH 16	,,
218	ІЈН 8	**	363	IJH 4	**
219	PS 3	Philadelphia	364	ІЈН б	Amman
253	RS III	"	365	IJH 20	Philadelphia
255	IJH 24	Amman	367	RS III Z	"
257	Weight	Philadelphia	368	RS III	lost
267	RS III	"	369	RS III	Philadelphia
268	RS III	"	383	ІЈН 3	"
269	RS III	,,	384	IJH 26	Amman
270	CC	,,	385	IJH 53	Philadelphia
292	IJH 41	,,	386	IJH 43	"
293	RS III S	,,	387+394	IJH 38	"
294	RS III	,,	388	IJH 27	Amman
300	CC	,,	. 389	IJH 25	Philadelphia

Note: RS-Royal Stamp; Roman numeral indicates type; H-Hebron, M-mmšt, S-Socoh, Z-Ziph. PS-Private Seal. IJH-Inscribed Jar Handle. CC-Concentric Circles inscribed on jar handles (see p. 21).

Field Number	Publication Reference	Assigned to	Field Number	Publication Reference	Assigned to
390	IIH 33	Philadelphia	473	IJH 28	Amman
390A	IJH 31	,, `	474	IJH 49	Philadelphia
391	IJH 44	**	475	IJH 10	**
392	IJH 35	"	476+472A	IJH 22	**
393	IJH 34	**	477	IJH 29	**
394 <b>+</b> 387	IJH 38	**	479	IJH 39	"
395	IJH 47	**	480	RS III Z	,,
396	IJH 1	Amman	481	RS III	,,
397	RS III H	Philadelphia	482	RS 11	Amman
398	RS III	**	483	RS I	Philadelphia
402	IJH 13	**	484	RS III	"
403	IJH 11	**	485	RS III S	,,
404	IJH 17	**	486	RS III M	**
405	IJH 48	**	487	RS III M	**
406	IJH 37	,,	488	RS III	,,
407	IJH 23	,,	489	RS III Z	,,
408	IJH 45	"	490	RS III Z	,,
409	RS III S	,,	491	RS II	,,
410	PS 4	Amman	495	IJH 32	,,
411	RS III	Philadelphia	498	RS III H	,,
412	RS III	Amman	499	RS III M	Amman
413	RS III	Philadelphia	500	RS III Z	Philadelphia
414	RS III	r ilitadeipilia	501	RS III Z	rimadeipma "
415	RS III S	,,	502		,,
416	RS III H	**	507	RS III RS III Z	,,
417	RS III S	,,	508	RS III Z	,,
418	RS III	,,			,,
443	IJH 15	Amman	509	RS II	,,
444	IJH 46		510	PS 2	**
445	IJH 52	Philadelphia	514	RS III	
446	IJH 54	Amman	515	RS I	Amman
447	2	Philadelphia Amman	520	RS III M	Philadelphia
448	IJH 50		521	RS III H	"
449	IJH 51	Philadelphia	522	RS III M	,,
	IJH 19	,,	523	RS I	,,
450 <b>+</b> 452 451	IJH 36	1)	524	PS 7	, ,,
	IJH 7	"	525	PS 5	,,
452+450	IJH 36	**	526	PS 6	,,
453	RS III	,,	530	RS III	
454	RS III S	,,	531	RS III Z	Amman
455	RS I or II	,,	532	RS III S	
456	RS III H	,,	540	RS III Z	Philadelphia
457	RS III H	,,	541	RS III S	,,
458	RS III	,,	542	RS II	,,
459	RS III	,,	554	PS 8	Amman
472	IJH 21	,,	555	RS III H	Philadelphia
472A+476	IJH 22	,,	563	RS III H	Amman

# FIGURES



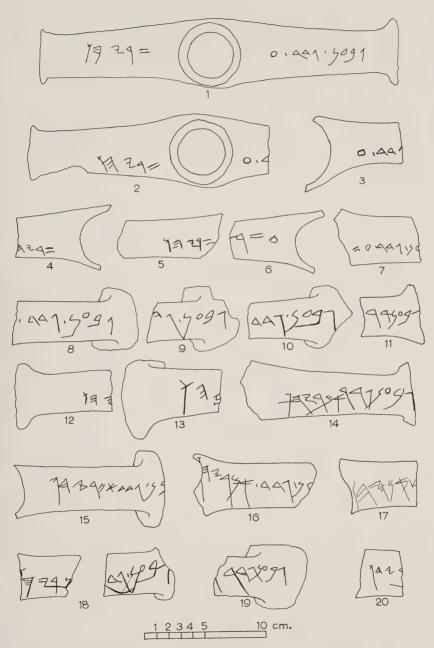


Fig. 1: Inscribed Jar Handles, Nos. 1-20

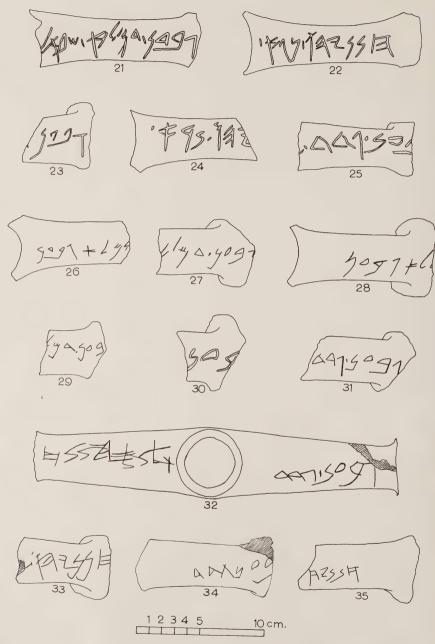


Fig. 2: Inscribed Jar Handles, Nos. 21-35

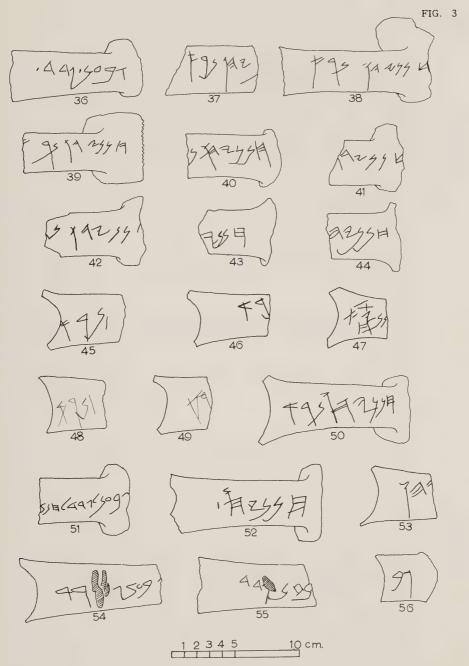


Fig. 3: Inscribed Jar Handles, Nos. 36-56

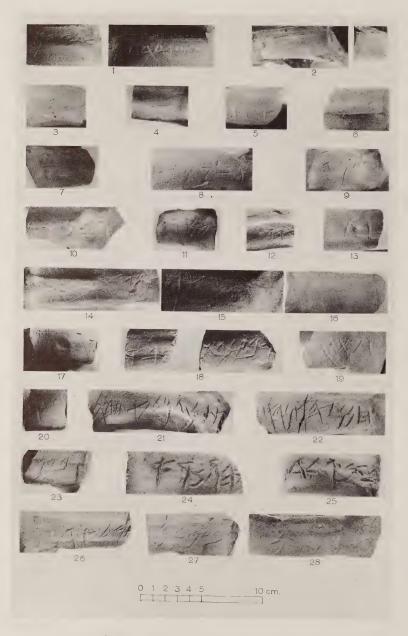


Fig. 4: Inscribed Jar Handles, Nos. 1-28

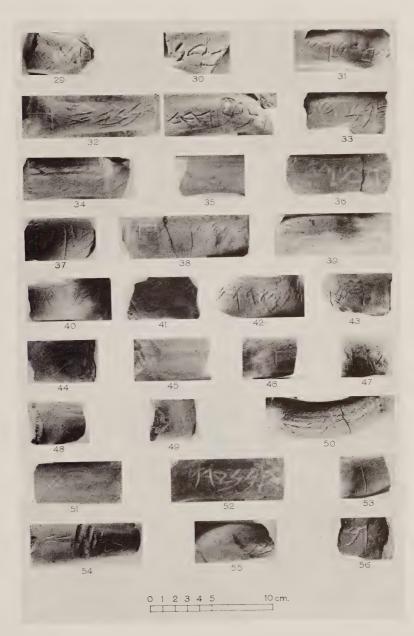


Fig. 5: Inscribed Jar Handles, Nos. 29-56



Fig. 6: Profiles of Jars with Inscribed Handles, Handles, Stoppers, and Funnel

Fig. 7: Table of Scripts of the Inscribed Jar Handles

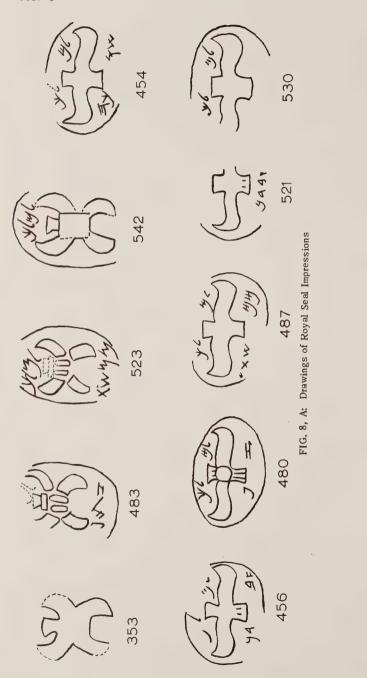


FIG. 8, B: Sections of Handles stamped with Royal Seal Impressions 

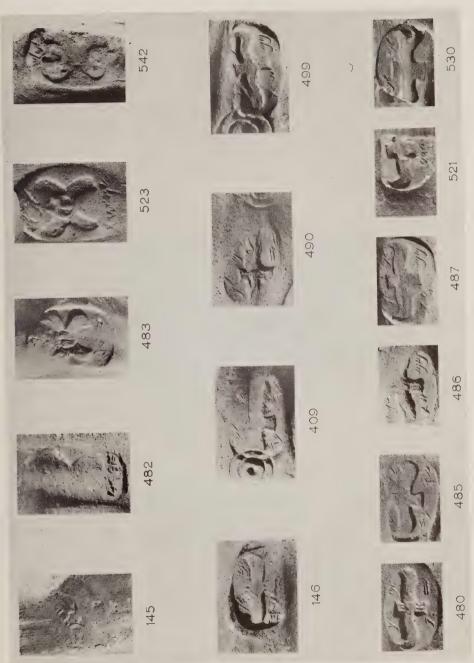


Fig. 9: Photographs of Royal Seal Impressions

6

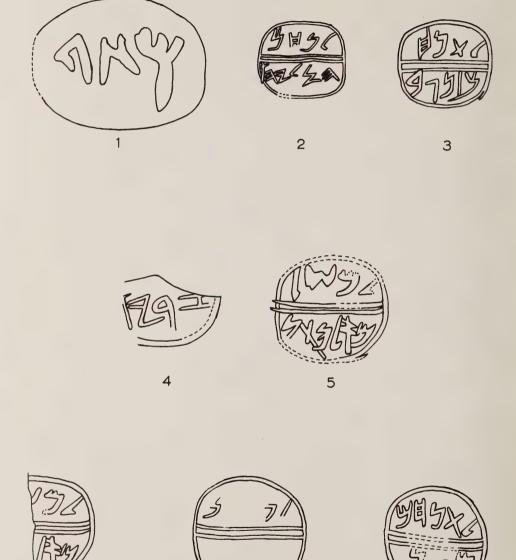


Fig. 10: Drawings of Private Seal Impressions

8

8



Fig. 11: Photographs of Private Impressions

7

6

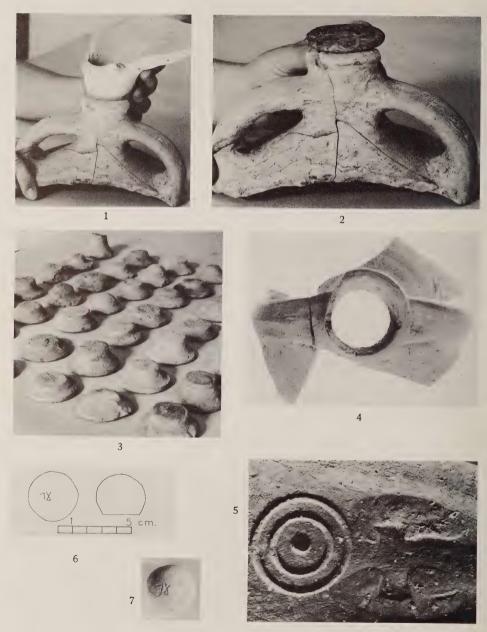
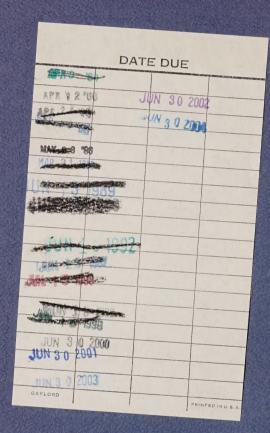


Fig. 12: Funnel (1), Stoppers (2, 3), Inscribed Jar Handles (4), Royal Stamp with Concentric Circles (5), and Weight (6, 7)

## MUSEUM MONOGRAPHS

- [1949] THE CODE OF LIPIT-ISHTAR. F. R. Steele. 28 pp. 7 pls. \$.50.
- [1949] SCHOOLDAYS: A SUMERIAN COMPOSITION RELATING TO THE EDUCATION OF A SCRIBE. S. N. Kramer. 19 pp. 4 pls. \$.50.
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- 1958 MIT RAHINEH 1955. Rudolf Anthes (with contributions by Hasan S. K. Bakry, John Dimick, Henry G. Fischer, Labib Habachi, Jean Jacquet). vi + 93 pp. 18 figs. in text. 45 pls. Map. \$4.00.
- 1959 HEBREW INSCRIPTIONS AND STAMPS FROM GIBEON, James B. Pritchard, vi + 32 pp. 12 figs, \$1.00.





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